EXHIBIT 24

1

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
--X
DARRYL CHALMERS, DARREN CONNORS, GLENN
MENDEZ, JAMES NOVA, and FATIMA Q. ROSEMOND,
On behalf of themselves and all others
similarly situated, and AFSCME DISTRICT
COUNCIL 37 LOCAL 2507, on behalf of its
Members,

                    Plaintiffs,

        -against-   Case No.:
                           1:20-cv-03389

CITY OF NEW YORK,

                    Defendant.
--X

                    July 19, 2021
                    10:05 A.M.

          DEPOSITION of the

CHRISTOPHER ERATH, a Non-Party Witness

herein, taken by the Plaintiffs, pursuant

to Notice and to the Federal Rules of Civil

Procedure, held via Zoom videoconference at

the above date and time, before Judy

Rosenberg, a Notary Public of the State of

New York.

2

```
 1

 2   A P P E A R A N C E S:

 3

 4   MEHRI & SKALET, PLLC
        Attorneys for the Plaintiffs
 5      1250 Connecticut Avenue, NW, Suite 300
        Washington, D.C. 20036
 6
     BY: MICHAEL LIEDER, ESQ.
 7   File #: 19109

 8

 9   NEW YORK CITY LAW DEPARTMENT
     OFFICE OF THE CORPORATION COUNSEL
10      Attorneys for the Defendant and Non-Party Witness
        100 Church Street
11      New York, New York 10007-2601

12   BY: AMANDA CROUSHORE, ESQ.,
          Assistant Corporation Counsel
13   File #: 2020-020833

14
     ALSO PRESENT:
15     AISHA RICH, ESQ.

16

17                     *          *          *

18

19

20

21

22

23

24

25
```

3

1

2   F E D E R A L   S T I P U L A T I O N S

3

4

5   IT IS HEREBY STIPULATED AND AGREED by and

6   between the counsel for the respective

7   parties herein that the sealing, filing and

8   certification of the within deposition be

9   waived; that the original of the deposition

10   may be signed and sworn to by the witness

11   before anyone authorized to administer an

12   oath, with the same effect as if signed

13   before a Judge of the Court; that an

14   unsigned copy of the deposition may be used

15   with the same force and effect as if signed

16   by the witness, 30 days after service of

17   the original & 1 copy of same upon counsel

18   for the witness.

19

20   IT IS FURTHER STIPULATED AND AGREED that

21   all objections except as to form, are

22   reserved to the time of trial.

23

24   *   *   *   *

25

4

1

2   (Whereupon, documents were

3   deemed marked as Plaintiffs' Exhibits

4   1 through 5 and 7 through 13 for

5   identification as of this date by the

6   Reporter.)

7   MS. CROUSHORE: I would like to

8   order a copy of the transcript,

9   please, for the City of New York.

10   THE STENOGRAPHER: It is hereby

11   stipulated and agreed by and between

12   counsel for all parties present that

13   pursuant to CPLR Section 3113(d) this

14   deposition is being conducted

15   remotely by videoconference, and that

16   the court reporter, witness and all

17   counsel are in separate remote

18   locations and participating via Zoom

19   or any web conference meeting

20   platform under the control of Bee

21   Reporting Agency, Inc.

22   It is further stipulated that

23   this videoconference will not be

24   recorded in any manner and that any

25   recording without the express written

5

```
 1
 2          consent of all parties shall be
 3          considered unauthorized, in violation
 4          of law and shall not be used for any
 5          purpose in this litigation or
 6          otherwise.
 7              Before I swear in the witness,
 8          I will ask each counsel to stipulate
 9          on the record that I, the court
10          reporter, may swear in the witness
11          even though I am not physically in
12          the presence of the witness and that
13          there is no objection to that at this
14          time, nor will there be an objection
15          at a future date.
16              MS. CROUSHORE:  No objection.
17              MR. LIEDER:  No objection from
18          plaintiffs.
19              THE STENOGRAPHER:  Counsel, can
20          you represent to the best of your
21          knowledge and belief that the witness
22          appearing today via web conference
23          is, in fact, Christopher Erath?
24              MS. CROUSHORE:  Yes, I can.  I
25          do.
```

6

1

2   C H R I S T O P H E R   E R A T H, called

3   as a witness, having been first duly sworn

4   by a Notary Public of the State of New

5   York, was examined and testified as

6   follows:

7

8   EXAMINATION BY

9   MR. LIEDER:

10   Q.   Please state your name for the

11   record.

12   A.   Christopher Erath.

13   Q.   What is your address?

14   A.   BLDS, LLC, 264 North Main

15   Street, Natick, Massachusetts 01760.

16   Q.   Good morning, Dr. Erath.

17   A.   Good morning.

18   Q.   As you know, since I deposed

19   you in one other case, my name is Michael

20   Lieder. I am a lawyer with the law firm of

21   Mehri & Skalet in Washington, D.C., and I

22   and Aisha Rich represent the plaintiffs in

23   this case.

24   Dr. Erath, you have testified

25   many times before, is that right?

7

```
 1                    C. ERATH

 2        A.    Yes.

 3        Q.    Because of that, I will forgo

 4   the normal instructions that attorneys

 5   often give to witnesses.

 6              Just reminding you that this is

 7   not an endurance contest, and if at any

 8   time you wish to take a break, please let

 9   us know, and we will take a break, the only

10   caveat being if there is a question

11   pending, I ask that you answer.  Is that

12   okay?

13        A.    Sure.

14        Q.    Dr. Erath, do you have in front

15   of you documents that I have designated as

16   exhibits to be used in this deposition?

17        A.    I don't have physical copies,

18   but I have them on the screen right over

19   there where I can pull them up with a

20   moment's notice (indicating).

21        Q.    We have designated as Exhibit 1

22   a document entitled expert report of

23   Christopher Erath, Ph.D.

24              Did you, in fact, prepare a

25   ten-page report with an eleventh page
```

8

```
 1                    C. ERATH
 2   entitled "materials relied upon"?
 3        A.    Sounds right.
 4        Q.    We have also designated as
 5   Erath Exhibit 2 a CV of Christopher Erath,
 6   Ph.D.  It is a three-page document that has
 7   your name at the top, and under your name
 8   the word director, contact information and
 9   then the word summary.
10             In this case, did you prepare a
11   CV that is as I describe?
12        A.    I don't think I prepared it for
13   this case, but you sound like you're
14   describing my CV.
15        Q.    I have designated as Exhibit 3
16   a document entitled expert report of
17   Dr. Harold W. Goldstein and Dr. Charles A.
18   Scherbaum that then has the title of the
19   case, Darryl Chalmers, et al, versus City
20   of New York, case number 1:20-cv-03389-AT,
21   and it is dated 6/9/2021.
22             Have you reviewed a document
23   that is so described?
24        A.    Yes, I have that expert report.
25        Q.    And then finally, because of my
```

9

1   C. ERATH

2   own error, the next document that I wanted

3   to call to your attention has been marked

4   as Exhibit 13 instead of four, but it is

5   entitled expert rebuttal report of Dr.

6   Harold W. Goldstein, Dr. Charles A.

7   Scherbaum, again, has the name of the case

8   and the case number and is dated 7/9/2021.

9   Do you have such a report?

10   A.   Yes.

11   Q.   Could you turn back to Exhibit

12   1, your expert report, to Page 11, the

13   materials relied upon? I want to go

14   through some of these to make sure I

15   understand what they are.

16   A.   Okay. I'm there.

17   Q.   Yes, good.

18   You will see that the second

19   item listed is described as exam applicant

20   data for FPIs, 6/21/21 dot xlsx.

21   Is this a spreadsheet, Excel

22   spreadsheet, that shows each exam for which

23   persons who were fire protection inspectors

24   for the City of New York at any time

25   between 2005 and 2020 applied?

10

```
 1                    C. ERATH
 2        A.    That is my understanding.
 3        Q.    And did you prepare this
 4  spreadsheet or did someone prepare it for
 5  you?
 6        A.    I did not prepare it.
 7        Q.    Do you know who did prepare it?
 8        A.    I received it from counsel.
 9        Q.    Other than that, you don't know
10  who prepared it or have no idea who
11  prepared it?
12        A.    Not off the top of my head.
13        Q.    And this is the spreadsheet
14  that is first referred to on Page 2 of your
15  report near the bottom of Page 2?  You will
16  see in the last paragraph on Page 2, the
17  second sentence begins:  I obtained data
18  showing exams applied for by those who held
19  an FPI position during the 2005 to 2020
20  period studied by G&S.
21              Do you see that?
22        A.    I do see that, and that does
23  appear to be the first reference.
24        Q.    And when you refer to G&S,
25  that's referring to Drs. Goldstein and
```

11

```
 1                    C. ERATH
 2   Scherbaum?
 3        A.    Not Gilbert and Sullivan.
 4        Q.    Are you a Gilbert and Sullivan
 5   fan?
 6        A.    Not their entire cannon, but I
 7   am partial to Pirates of Penzance.
 8        Q.    Could we go down to item six of
 9   the materials relied upon?  Do you have it?
10        A.    Yes.
11        Q.    It is described as OES data for
12   fire inspectors and investigators, NS
13   construction inspectors, accessed at
14   bls.gov.
15              Do you see that?
16        A.    Yes.
17        Q.    Is this the data that you
18   referred to on Page 9 of your report?
19        A.    Yes.
20        Q.    Let's go back to item ten.  It
21   says it is inspector title employee data
22   spreadsheet.  What is this?
23        A.    I'm drawing a complete blank on
24   what this is.
25        Q.    Well, could this be the data
```

12

```
 1                    C. ERATH

 2   produced in this case showing human

 3   resources actions affecting inspectors from

 4   2005 to '20?

 5        A.    Yes.

 6        Q.    And then above it, item nine

 7   says DCAS supplement for associate

 8   inspector construction spreadsheet.

 9             Is that a supplement that was

10   produce separately from the spreadsheet

11   that is item ten?

12        A.    Yes.

13        Q.    Is it your understanding that

14   this supplement was produced in June of

15   2021?

16        A.    I don't know when it was

17   produced.

18        Q.    The 11th item refers to Ronald

19   Ehrenberg and Robert Smith, Modern Labor

20   Economics, 8th edition.

21             Dr. Erath, I went online and

22   found an Ehrenberg and Smith book called

23   Modern Labor Economics Theory and Public

24   Policy.  Is that what you are referring to?

25        A.    I suspect it's the same.  I
```

13

1   C. ERATH

2   don't recall the subtitle one way or the

3   other, but they -- their textbook is

4   certainly called Modern Labor Economics.

5   Q.   And the version that you have

6   available is the 8th edition?

7   A.   It's the one that I had at

8   arm's reach.

9   Q.   I assume that there are lots of

10 labor economics textbooks out there in the

11 world. Is there some reason that you

12 referred to Ehrenberg and Smith, as opposed

13 to other textbooks?

14   A.   No overpowering reason. I

15 mean, you're right, there are several

16 textbooks. I've all been of the opinion

17 that Ehrenberg and Smith is among the

18 normally considered books, not the only one

19 by any stretch of the imagination, but it's

20 a mainstream labor text, so that's what I

21 was looking for.

22   Q.   And as far as you know, it

23 reliably sets out labor economics

24 principles?

25   A.   That's awfully broad. You just

14

1   C. ERATH

2   asked me to -- to agree with everything in

3   it. So I'm sure the principles are

4   accurately stated, but, you know, it's --

5   it's certainly a generally-used text in

6   labor and economics.

7   Q.   The 12th item is called FDNY

8   fire inspection inspector flier. Do you

9   see that?

10   A.   Yes.

11   Q.   And is this the flier that you

12   referenced near the bottom of Page 5 of

13   your report, the last paragraph?

14   A.   Yes.

15   Q.   Do you know the date of this

16   flier, or do you have a copy of it at the

17   end?

18   A.   I don't know the date, although

19   it has to be relatively recent, since it's

20   talking about a 37-and-a-half-hour

21   workweek, and that wasn't the case from the

22   beginning of the time period. I perhaps

23   could find a copy if you -- if you give me

24   a minute.

25   Q.   Sure, if you think you could

15

```
 1                      C. ERATH

 2   find it shortly.

 3             MS. CROUSHORE:  I can try to

 4        find it too, Chris and Mike.

 5             MR. LIEDER:  It is just that

 6        there are a number of fliers and so I

 7        don't know which one he is talking

 8        about.

 9        A.    I found it.

10        Q.    If you could send it to Amanda.

11             MR. LIEDER:  And Amanda, if you

12        could send it to me, I'd appreciate

13        it.

14             MS. CROUSHORE:  Sure.

15        Q.    Let's go back to your materials

16   relied upon.  The number 13 is a document

17   that is described as

18   Cbu004-engineering-and-scientific dash

19   agreement, it goes on.

20             I will represent to you, I put

21   that into a search engine, and it appears

22   to be a collective bargaining agreement

23   covering fire protection inspectors and

24   associate fire protection inspectors, along

25   with lots of others from 2008 to '10, is
```

16

1   C. ERATH

2   that correct?

3   A.   Yes.

4   Q.   And how did you use that

5   document in your report or in reaching your

6   opinions?

7   A.   One thing I used it for was the

8   existence of longevity pay.

9   Q.   Did you use it for any other

10 purposes?

11   A.   I can't recall anything

12 specifically, although I certainly reviewed

13 it. There may have been other things that

14 I gleaned from it.

15   Q.   The 14th item is a URL that at

16 the end refers to inspector boilers. And I

17 put that into a search engine or clicked on

18 it and found that it is a notice of

19 examination for inspector boilers from

20 2003.

21   How did you use this particular

22 document in forming your opinions in this

23 case?

24   A.   I was interested in looking at

25 the differences in sought-after

17

```
 1                    C. ERATH

 2   qualifications for some of the more

 3   specialized Department of Buildings

 4   positions.  So this was an example of that.

 5        Q.    Finally, there is a reference

 6   to an e-mail concerning FPI applicants to

 7   inspector construction position.

 8             Do you know what e-mail you are

 9   referring to here?

10        A.    The content of it is a

11   description of the, I believe, 12

12   individuals who applied who were FPIs

13   applied to the inspector construction and

14   what happened to their applications, the

15   outcomes.

16        Q.    Does it contain the actual

17   files for those individuals or merely a

18   description?

19        A.    The latter.

20        Q.    The latter?

21        A.    Yes.

22        Q.    Do you know who prepared this

23   particular e-mail?

24        A.    I don't recall.

25        Q.    Do you know what source of
```

18

1   C. ERATH

2   information they used in preparing this

3   e-mail?

4   A.   I don't.

5   Q.   Were there any other documents

6   on which you relied that are not listed on

7   Page 11?

8   A.   I don't believe so.

9   Q.   Now, you state in your report

10 that the city engaged you to review the

11 report of Drs. Goldstein and Scherbaum in

12 this case. When did the city engage you?

13   A.   I don't recall.

14   Q.   Do you have an approximate

15 date?

16   A.   Not really.

17   Q.   When did you start doing work

18 that contributed to the report that you

19 ultimately prepared?

20   A.   Probably shortly after the -- I

21 received the report.

22   Q.   So you hadn't done some

23 preliminary work before you received the

24 report?

25   A.   I had taken a look at some of

19

```
 1                    C. ERATH

 2    the data that I understood to be produced.

 3    But your previous question said ended up in

 4    my report, which is critique.

 5         Q.    When you say had done some

 6    preliminary review of the data beforehand,

 7    about how long did you spend with that

 8    preliminary review of the data?

 9         A.    I don't know.

10         Q.    So is it fair to say that other

11    than that preliminary review of the data,

12    that you had no more than three weeks to

13    work on the report?

14         A.    I certainly didn't have a long

15    time to work on the actual critique, since

16    I needed to see what I was critiquing.

17    I'll certainly agree with that.  I had -- I

18    had the data, as we've discussed, prior to

19    that point.

20         Q.    Had you done any analysis of

21    the data prior to that point?

22         A.    I would say what I was doing

23    was more trying to make sure I understood

24    what was there.

25         Q.    Prior to receiving
```

20

```
 1                    C. ERATH
 2    Drs. Goldstein's and Scherbaum's report,
 3    had you attempted any analysis of the data
 4    that you had received?
 5              MS. CROUSHORE:  Objection.
 6              You can answer.
 7         A.   What do you mean by analysis?
 8         Q.   Had you done more than simply
 9    look at the data to see what type of
10    information was there?
11         A.   I had spent some time trying to
12    make sure I understood what appeared to be
13    anomalies in the data, just so I could, you
14    know -- when I got the report, I would know
15    what I was working with.
16         Q.   Aside from making that effort
17    to identify and understand any anomalies in
18    the data, had you done additional work?
19         A.   I don't think so.
20         Q.   Dr. Erath, do you remember that
21    I deposed you in the case of Richardson
22    versus City of New York in April of 2020?
23         A.   I don't have the date set in
24    mind, but I have a general recollection.
25         Q.   Roughly a year ago?
```

21

```
 1                    C. ERATH
 2        A.    Sounds right.
 3        Q.    Do you recall testifying at
 4   that time that roughly half of your
 5   billable work was as a testifying expert
 6   and approximately half as a consultant?
 7        A.    Sounds right.
 8        Q.    And would you make that same
 9   rough estimate?
10        A.    As long as we agree on the word
11   rough, yeah.
12        Q.    So let's focus on what is
13   roughly half of your billable work in which
14   you serve as a testifying expert, as
15   opposed to a consultant.  And then could
16   you turn to what was marked as Exhibit 2,
17   your CV?
18        A.    I have it.
19        Q.    And could you turn to Page 3 of
20   the CV under testimony?
21        A.    I'm there.
22        Q.    Good, thank you.
23              Is this testimony arranged at
24   least roughly in reverse chronological
25   order?
```

22

```
 1                    C. ERATH
 2        A.    Again, roughly.
 3        Q.    And so that at least roughly,
 4   Foster versus City of New York would have
 5   been the most recent case in which you had
 6   given testimony at the time that you
 7   prepared this CV or updated it?
 8        A.    We can -- we can take roughly
 9   out of that sentence.  That was the last
10   one.  With the understanding that that
11   deposition was actually taken
12   simultaneously with the De La Cruz, which
13   was next, so you have to flip a coin to see
14   which one was later.
15        Q.    And approximately when were you
16   deposed in the Foster and De La Cruz
17   matters?
18        A.    Maybe a month ago.
19        Q.    You will notice that of the
20   first ten listings starting with Foster and
21   De La Cruz, nine of them involve litigation
22   against the City of New York?
23        A.    Yes.
24        Q.    In each of those cases, were
25   you retained by the city?
```

23

```
 1                    C. ERATH
 2        A.    Yes.
 3        Q.    So of those ten, at least
 4   roughly, Worley would have been the one
 5   that was earliest in time?
 6        A.    Roughly.
 7        Q.    And approximately when did you
 8   testify in the Worley case?
 9        A.    I can guess.  I don't recall.
10        Q.    Two years ago?
11        A.    I'm -- I was going to guess
12   three but not with a lot of confidence.
13        Q.    So in the last roughly three
14   years, you have testified in at least nine
15   cases for the City of New York, is that
16   right?
17        A.    Roughly.
18        Q.    Now, you said that the Foster
19   and De La Cruz deposition occurred
20   simultaneously, right?
21        A.    That's right.
22        Q.    Were the cases brought as
23   related cases, do you know?
24        A.    I don't know.
25        Q.    In any of the other of the nine
```

24

```
 1                    C. ERATH

 2  cases through Worley for which you were

 3  testifying for the City of New York, were

 4  the depositions simultaneous, as they were

 5  in De La Cruz and Foster?

 6        A.    Only the fourth entry there

 7  where they're all on the same line.

 8        Q.    Before the deposition testimony

 9  in each of these cases, did you prepare a

10  written report?

11        A.    I think so.

12        Q.    Have any of the cases gone to

13  trial yet?  Let me ask that differently.

14  Have you testified at trial in any of these

15  cases?

16        A.    No.

17        Q.    Do you know, are there plans

18  for you to testify at trial in any of these

19  cases?

20        A.    I don't know.

21        Q.    In each of these cases for

22  which you have been retained by the City of

23  New York in the last three or so years, and

24  I know that that's a rough estimate, have

25  you billed the city for your work at your
```

25

1   C. ERATH

2   normal billing rate?

3   A.   No.

4   Q.   In some of them you have billed

5   the city at a rate that's other than your

6   normal billing rate?

7   A.   Correct.

8   Q.   Have you billed the city at

9   lower or higher rates than you normally do?

10   A.   Lower.

11   Q.   And in which of these cases

12   have you billed the city at a lower billing

13   rate?

14   A.   To the best of my recollection,

15   all of them.

16   Q.   What is your normal billing

17   rate?

18   A.   575.

19   Q.   And what do you bill the city

20   at?

21   A.   500.

22   Q.   And are you also billing the

23   city at $500 an hour for your work in this

24   case?

25   A.   Yes.

26

```
 1                    C. ERATH

 2        Q.    Have you currently been

 3   retained by the city in any other matters

 4   in which you have not yet given testimony?

 5        A.    Yes.

 6        Q.    Which other matters are they?

 7        A.    I don't know that I've been

 8   identified, so I'm hesitant to answer that

 9   question.

10        Q.    One case where I saw your name

11   in a Lexis report is Local 3621, EMS

12   Officers Union, versus City of New York.

13   Have you been retained in that case?

14        A.    Doesn't ring a bell, but I

15   might not know the formal caption.

16        Q.    This is a case alleging racial

17   and gender discrimination by officers of

18   the emergency medical service, EMS.

19        A.    Okay.  Yes is the answer to

20   your question.  I have worked on that.

21        Q.    Is this list of testimony in

22   your Exhibit 2 testimony given within the

23   last four years?

24        A.    Roughly.  Probably goes a

25   little farther in.
```

27

```
 1                    C. ERATH
 2        Q.    Are there any other cases as
 3   you look at this list in which the city has
 4   engaged you in the past four years and you
 5   have given testimony that is not listed on
 6   this CV?
 7        A.    The only one I can think of is,
 8   I have worked on a lawsuit where the named
 9   plaintiff is Gulino, G-U-L-I-N-O, and I
10   don't have it listed here because the case
11   is before a special master.  And we've met
12   and talked to him, and it never was clear
13   to me what counted as testimony and what
14   wasn't, since it was not in -- even before
15   the pandemic was not in a formal setting.
16        Q.    About what percentage of your
17   expert work within over the past four years
18   would you say was done for the City of New
19   York?
20        A.    I don't have a number, but if
21   you'd like me to take a guess, I can do
22   that.
23        Q.    Okay, please do.  Best
24   estimate.
25        A.    Around half.
```

28

```
 1                      C. ERATH
 2          Q.     How about in the last three
 3    years where you show nine of the ten cases
 4    listed at the top of your testimony list as
 5    being for the City of New York, is it more
 6    than half?
 7          A.     I would say around half.
 8          Q.     In addition to your expert
 9    witness work for the City of New York, do
10    you do any consulting work for the City of
11    New York?
12          A.     I don't believe so.
13          Q.     Dr. Erath, could you turn back
14    to your expert report, first page?  You say
15    in the first paragraph, I think third
16    sentence:  I received a Ph.D. in economics
17    from the University of Wisconsin where my
18    fields of interest included labor
19    economics, econometrics, and industrial
20    organization.
21              Do you see that?
22          A.     Yes.
23          Q.     What do you mean by the
24    reference to industrial organization?  Do
25    you mean industrial, biopsychology or
```

29

```
 1                     C. ERATH
 2    something else?
 3         A.    I do not mean psychology.
 4         Q.    What do you mean by the phrase
 5    "industrial organization"?
 6         A.    It's a field within economics,
 7    generally understood to be the interplay
 8    between firms in the competitive market.
 9         Q.    What do you mean by interplay
10    between firms in the competitive market?
11         A.    You could think of it as the
12    study of firm behavior, how your firm might
13    respond to a new product introduction by my
14    firm, for instance.
15         Q.    It doesn't get down to the
16    level of personnel decisions by a firm?
17         A.    It could, although we're sort
18    of crossing into labor economics at that
19    juncture.
20         Q.    You say that you did not mean
21    to include industrial organizational
22    psychology in the phrase industrial
23    organization, is that right?
24         A.    That is right.
25         Q.    In your graduate work, did you
```

30

```
 1                    C. ERATH

 2   take any courses in industrial

 3   organizational psychology?

 4        A.   No.

 5        Q.   In your undergraduate work, did

 6   you take any courses in that area, if you

 7   remember?

 8        A.   I did not.

 9        Q.   Have you ever instructed a

10   course in IO psychology?

11        A.   No.

12        Q.   Since your graduation, have you

13   written at all in the field of IO

14   psychology?

15        A.   No.

16        Q.   Have you given any testimony as

17   an expert witness in the field of IO

18   psychology?

19        A.   No.

20        Q.   Have you done any consulting

21   work in the field of IO psychology?

22        A.   No.

23        Q.   So is it fair to say you don't

24   hold yourself out as an expert in the field

25   of IO psychology?
```

31

1   C. ERATH

2   A.   Yes.

3   Q.   You do consider yourself an

4   expert in the field of labor economics, is

5   that right?

6   A.   Yes.

7   Q.   Are there any other fields that

8   you consider yourself an expert in?

9   A.   Statistics.

10   Q.   Anything else?

11   A.   You can throw econometrics in

12   there, which is the crossover between the

13   two.

14   Q.   Have you ever performed a job

15   analysis?

16   A.   What do you mean by that?

17   Q.   As an IO psychologist would

18   define the term, have you ever performed a

19   job analysis?

20   MS. CROUSHORE: Objection.

21   A.   I -- that doesn't help me with

22   the clarification I sought.

23   Q.   Had you ever performed an

24   analysis of a particular job to determine

25   the job duties and knowledge, skills and

32

```
 1                    C. ERATH

 2   abilities needed to perform those job

 3   duties?

 4        A.    I have not.

 5        Q.    Would you turn to Page 2 of

 6   your report, footnote one.  The footnote

 7   starts out:  I am not a job content expert.

 8              What do you mean by job

 9   content?

10        A.    The specific tasks performed by

11   one job as opposed to another.

12        Q.    And you then say you take no

13   position on the nature of the work portion

14   of the report of Drs. Goldstein and

15   Scherbaum beyond the labor market evidence

16   that you describe in your report.

17              By the nature of the work

18   portion, do you mean the section of their

19   report that begins on Page 20, if you look

20   at Exhibit 3?

21        A.    That looks right.

22        Q.    So you are taking no position

23   on whether the inspector jobs at the fire

24   department and the Department of Buildings

25   are similar except to the extent of the
```

33

```
 1                   C. ERATH
 2   labor market evidence that is presented in
 3   your report, is that correct?
 4              MS. CROUSHORE:  Objection.
 5      A.   Apart from what I discuss in my
 6   report, that's correct.
 7      Q.   And I think it's pretty clear
 8   from what I asked.  Is the labor market
 9   evidence that you present in your report
10   presented in your capacity as a labor
11   economist, rather than as an IO
12   psychologist?
13      A.   Yes.
14              I can use a bathroom break,
15   whenever you have a moment.
16      Q.   I actually was thinking I need
17   to get some water, so why don't we take a
18   five-minute break.
19      A.   That would be great.  Thank
20   you.
21      Q.   Okay, see you soon.
22              (Whereupon, a short recess was
23       taken.)
24      Q.   Dr. Erath, at the bottom of
25   Page 2 of your report, Exhibit 1, you said
```

34

```
 1                    C. ERATH

 2   that the data that you obtained about exams

 3   for which people holding an FPI position by

 4   2005 to '20 covered 669 fire protection

 5   inspectors.

 6              Do you see that?

 7        A.   Yes.

 8        Q.   Did you make any attempt to

 9   determine the number of FPIs during the

10   period of May 2017 through the end of the

11   data?

12        A.   No.

13        Q.   You may have noted that on Page

14   11 of their report, Drs. Goldstein and

15   Scherbaum state that there were a total of

16   507 unique individuals during that period

17   of 2017 to 2020.  Do you see that?

18        A.   I'm sorry, which page?

19        Q.   Page 11, second paragraph.

20        A.   I see it.

21        Q.   Did you attempt to replicate

22   that number?

23        A.   Yes.

24        Q.   And were you able to do so?

25        A.   I may not have gotten precisely
```

35

```
 1                   C. ERATH

 2   507 but something quite close to that if

 3   not.

 4         Q.    Could you turn to Drs.

 5   Goldstein and Scherbaum's report, original

 6   report on pages nine to ten, Table 1?

 7         A.    I'm there.

 8         Q.    And you will see that this

 9   table presents their counts of the number

10   of fire protection inspectors and the

11   number of Department of Building inspectors

12   with various job titles.  Is that what it

13   purports to do?

14         A.    That is how they describe it,

15   yes.

16         Q.    And then you state in your

17   report on Page 8 that you could replicate

18   some of their numbers but not all of them,

19   is that correct?

20         A.    It is correct that I could

21   replicate some of them, yes.

22         Q.    Were you able to replicate the

23   numbers that they gave for fire protection

24   inspectors?

25         A.    Some of them.
```

36

```
 1                    C. ERATH
 2      Q.    Do you know which ones for the
 3  fire protection inspectors you were not
 4  able to replicate?
 5      A.    I didn't make specific note of
 6  it, but the recollection I have is, it was
 7  more problematic for the later years.
 8      Q.    Here I am asking just about the
 9  fire protection inspectors, not the DOB
10  inspectors.  You are saying even for the
11  fire protection inspectors, it was
12  problematic in the later years?
13      A.    That's my recollection,
14  although I did preface it by saying I did
15  not take notes as to which years matched
16  and which did not.
17      Q.    Even if you didn't take notes
18  on which years, did you note how many of
19  the years you had a disagreement on their
20  counts of fire protection inspectors?
21      A.    No.
22      Q.    Again limited to fire
23  protection inspectors, were any of the
24  disagreements in numbers where you weren't
25  able to replicate by more than five
```

37

```
 1                    C. ERATH

 2   percent?

 3        A.    I don't recall specifically,

 4   but my guess would be no.

 5        Q.    You said your guess would be

 6   no?

 7        A.    Yes.

 8        Q.    Now, you go on to state at Page

 9   8 that their counts are off for associate

10   construction inspectors in 2020 when they

11   report 98 people with that title, even

12   though the title was eliminated in 2019.

13             Do you see that?

14        A.    I see that example of a

15   mistake, yes.

16        Q.    Have you reviewed their

17   rebuttal report?

18        A.    Yes.

19        Q.    And they explain that they did

20   double count where construction inspectors

21   moved in a year between the associate and

22   the non-associate level position, is that

23   right?

24        A.    Frankly, I found their

25   explanation somewhat confusing.  You're
```

38

```
 1                    C. ERATH
 2   right that they did admit to double
 3   counting and particularly in regard to the
 4   2020 associate inspector construction, but
 5   it wasn't clear to me if that was the
 6   extent of the double counting they were
 7   admitting to.
 8        Q.   Let's look at their rebuttal
 9   report, which was marked as Exhibit 13, and
10   look at the appendix A, which is a series
11   of tables, and the first of them, which is
12   Table 1.
13             Now, you will see in Table 1
14   that there are for four years numbers in
15   bold below numbers in regular type.  Do you
16   see that for 2007, 2008, 2019, and '20?
17        A.   Yes.
18        Q.   And do you understand from the
19   report that Drs. Goldstein and Scherbaum
20   considered the bolded numbers the corrected
21   numbers?
22        A.   That sounds right.
23        Q.   Did you attempt to replicate
24   the bolded numbers to see if you agreed
25   with those bolded numbers?
```

39

1   C. ERATH

2   A.   No.

3   Q.   Do you have any understanding

4   as you sit here today whether you think

5   that the numbers as they appear in bold are

6   correct or incorrect?

7   A.   Like I said, I haven't checked

8   them.

9   Q.   Could you turn to the next page

10   of the rebuttal report, Table 2? And --

11   A.   I'm sorry, the rebuttal report?

12   Q.   Yes.

13   A.   Okay.

14   Q.   And you will again see numbers

15   in bold for 2007, '08, '19 and '20.

16   Did you attempt to replicate

17   the numbers in bold?

18   A.   No.

19   Q.   You will see that under

20   associate inspector construction, it now

21   shows zero individuals in 2020. Do you see

22   that?

23   A.   Yes.

24   Q.   Is that your understanding of

25   what the numbers should be in 2020?

40

1   C. ERATH

2   A.   Yes.

3   Q.   I asked you generally, but to

4   be specific, did you check the number in

5   2019 to see if you agreed with it?

6   A.   I did not.

7   Q.   You said that you didn't

8   understand part of Drs. Goldstein and

9   Scherbaum's explanation for the changes in

10   numbers. What didn't you understand about

11   it?

12   A.   As I said, it was clear they

13   were saying there was double counting in

14   their original report, just the extent of

15   it wasn't clear to me.

16   Q.   Could you turn to Drs.

17   Goldstein and Scherbaum's original report,

18   and then to Page 13, which contains

19   Table 3?

20   A.   I have it.

21   Q.   If you have the ability to have

22   two documents open at once, I am also going

23   to be asking you about their rebuttal

24   report, Table 3, which is the revised

25   version of that.

41

1   C. ERATH

2   Do you have that?

3   A.   Yeah.

4   Q.   Table 3 lists the percentage of

5   minority and white inspectors in the fire

6   department and the Department of Buildings

7   in each fiscal year, is that correct?

8   A.   I believe it's intended to be

9   as of the end of each fiscal year.

10   Q.   I believe you are correct in

11   that.

12   In your report, you do not

13   identify any of these percentages in Table

14   3 that were incorrect? Is it correct that

15   you have not identified any numbers or

16   percentages that were incorrect?

17   A.   I think you are right. I

18   didn't specifically talk about the

19   percentages, although obviously if the

20   counts are wrong, the percentages are going

21   to be affected as well.

22   Q.   Did you attempt to replicate

23   the percentages that are shown in Table 3?

24   A.   No.

25   Q.   If you look at rebuttal report,

42

```
 1                    C. ERATH
 2   Table 3, which are what they purport to be,
 3   the corrected numbers, did you attempt to
 4   replicate those?
 5        A.    No.
 6        Q.    So you have no basis as you sit
 7   here now for saying whether these
 8   percentages are correct or incorrect?
 9        A.    I have not checked them.
10        Q.    You do report in your report on
11   Page 8 about halfway down the page that --
12   have you found it?
13        A.    I'm looking at Page 8.
14        Q.    Okay.  The report about halfway
15   down the page that the listed race in the
16   spreadsheet for a single individual can be
17   reported in one year but not another, and
18   you see no indication that Drs. Goldstein
19   and Scherbaum used that information to fill
20   in this race.  Do you see that?
21        A.    Yes.
22        Q.    How did you determine that the
23   listed race in the spreadsheet for a single
24   individual can be reported in one year but
25   not in another?
```

43

1   C. ERATH

2   A.   Reviewing the data.

3   Q.   And you are not saying that the

4   spreadsheet was blank in a given year,

5   rather, what you are saying is that the

6   race was unidentified in one year and that

7   it might be identified in another, is that

8   correct?

9   A.   That's correct.

10   Q.   So did you use the race

11   information from one year to fill in the

12   missing race information in other years?

13   A.   No.

14   Q.   Do you know how filling in that

15   information would have changed Drs.

16   Goldstein and Scherbaum's counts by race?

17   A.   I do not.

18   Q.   Or how it would have impacted

19   the percentages that they report in that

20   rebuttal Table 3?

21   A.   I have not performed that

22   calculation.

23   Q.   Did you make any assessment of

24   how often that type of change occurred?

25   A.   No formal assessment. It's

44

```
 1                    C. ERATH
 2   something that I saw happening a number of
 3   times, but I did not render it to a figure.
 4        Q.    Does it seem right to you that
 5   there were a total of only 38 such changes
 6   over all the years?
 7        A.    That seems low, but like I
 8   said, I did not do a count.
 9        Q.    Did you attempt to assess in
10   what direction the changes were?
11        A.    What do you mean?
12        Q.    Well --
13        A.    Excuse me, sorry.
14        Q.    Are you okay?
15        A.    I think so.
16        Q.    Do you want to take a break for
17   a couple of minutes?
18        A.    I'm fine.
19        Q.    We went back and looked, and to
20   the best of our knowledge, there were a
21   total of 21 changes among DOB inspectors,
22   and 15 of them went from unknown to white.
23   Does that sound right to you, that that was
24   the predominant change among DOB
25   inspectors?
```

45

```
 1                    C. ERATH

 2       A.    I did not investigate

 3  predominants.

 4       Q.    If Dr. Scherbaum had gone back

 5  and changed the race of those 15

 6  individuals from unknown to white, it would

 7  have increased the white percentage among

 8  DOB inspectors, is that right?

 9       A.    If that's the only change he

10  made, yes.

11       Q.    Do you know whether most of the

12  changes at fire department were from a one

13  or more minority designations to unknown?

14       A.    I'm sorry, most of what?

15       Q.    That most of the changes went

16  from a designation of someone as a racial

17  minority, whether black or Hispanic, to

18  unknown race?

19       A.    I don't know one way or the

20  other.

21       Q.    Where someone was changed from

22  a designation as a racial minority or white

23  to unknown, what do you believe that Drs.

24  Goldstein and Scherbaum should have done?

25       A.    Given that the individual has
```

46

```
 1                      C. ERATH
 2   an identified race at some point, they
 3   should have taken a look at what the effect
 4   would have been if they didn't use that
 5   identified race for that person rather than
 6   dropping it.
 7        Q.    So if they had done that where
 8   someone had been designated as minority and
 9   then it was changed to unknown and they had
10   counted them as minority, that would have
11   increase the minority percentages at FDNY,
12   is that correct?
13        A.    If that's the only change that
14   was made.
15        Q.    Let's assume that there were
16   only these 38 changes.  Do you believe this
17   would have had any impact on the opinions
18   that Drs. Goldstein and Scherbaum reached
19   about the differences in race between the
20   two work forces?
21        A.    I'm not going to speak for
22   them.
23        Q.    Do you believe it would have
24   had any change in the outcome of the
25   analyses that they did concerning
```

47

```
 1                    C. ERATH

 2   compensation?

 3             MS. CROUSHORE:  Objection.

 4        A.   Again, not my place to speak

 5   for them.

 6        Q.   Could you look again at

 7   rebuttal, Table 3?  You will see that the

 8   last column in the table purports to show

 9   the percentage of the DOB inspectors who

10   were white divided by the percentage of the

11   fire department inspectors who were white.

12             Do you see that?

13        A.   I see the column, yes.

14        Q.   Did you attempt to replicate

15   these numbers to determine whether they

16   were calculated correctly?

17        A.   No.

18        Q.   It purports to show that in

19   every year between 2005 and 2020, the

20   percentage of white inspectors at the

21   Department of Buildings was at least 60

22   percent higher than the percentage of white

23   fire protection inspectors, is that

24   correct?

25        A.   That is what it purports to
```

48

1   C. ERATH

2   show.

3   Q.   Do you have any basis for

4   disputing that that ratio was always at

5   least 60 percent higher during the period

6   2005 through '20?

7   A.   I have not attempted to

8   calculate any such ratios.

9   Q.   Could you turn back to Page 8

10   of your report? You state in the next to

11   last paragraph, the last sentence, that

12   every statistical test G&S report rests

13   upon the assumption that inspectors at FDNY

14   and DOB should have identical racial

15   composition.

16   Do you see that?

17   A.   Yes.

18   Q.   And are you referring to by

19   statistical tests to the Z score test and

20   the Fishers Exact Test that they report in

21   their Tables 4 and 5?

22   A.   I believe that is the case,

23   yes.

24   Q.   Were you referring to any other

25   tasks other than those two types of tests?

49

```
 1                   C. ERATH

 2       A.    Table 4 has a two standard

 3   deviation test.  If that's what you're

 4   referring to as Z score, then yes, we've

 5   covered that one.

 6       Q.    Yes, that's what I was

 7   referring to.

 8       A.    Then we've got it.

 9       Q.    Are there any tests that you

10   believe they could have performed to

11   properly compare the racial makeup of the

12   FDNY and DOB inspectors?

13             MS. CROUSHORE:  Objection.

14       A.    To do a proper test, they would

15   have had to take the applicant pools into

16   account.

17       Q.    Do you know whether information

18   about the racial composition of the

19   applicant pools has been made available in

20   this case?

21             MS. CROUSHORE:  Objection.

22       A.    I don't -- I don't believe it

23   has.

24       Q.    You believe that the

25   requirements to be minimal requirements to
```

50

```
 1                    C. ERATH

 2   be a DOB inspector are more difficult to

 3   meet than the minimum requirements to be a

 4   Fire Protection Inspector?

 5            MS. CROUSHORE:  Objection.

 6       A.    Difficult is a subjective term.

 7   They are certainty different.

 8       Q.    Do you have any reason to

 9   believe that the percentage of

10   African-Americans who would meet the

11   minimum requirements to be a DOB inspector

12   are different than the percentage of -- I

13   said African.  Let me start over.

14            Do you have any reasons to

15   believe that the percentage of individuals

16   who were racial minorities and applied to

17   become a Department of Buildings inspector

18   are any different than the percentage of

19   minorities among the poor who applied to

20   become a Fire Protection Inspector?

21            MS. CROUSHORE:  Objection.

22       A.    I have not studied those data,

23   but you wouldn't just want to look at

24   people who apply.  You want to look at

25   people who were -- who met the minimum
```

51

                            C. ERATH

2   qualifications.

3   Q.   And do you have any reason to

4   think that those who met the minimum

5   qualifications among the applicants were

6   different in racial composition?

7   A.   I have not studied the data.

8   Q.   In the absence of that data to

9   study, is the most that you believe that an

10   expert who wanted to compare the racial

11   makeup of the fire department and

12   Department of Building inspectors do is to

13   report the percentages of white and

14   minority inspectors in each agency?

15   MS. CROUSHORE: Objection.

16   A.   I mean, you say the most you

17   can do. I mean, without looking at who met

18   the qualifications, I don't think it's a

19   terribly useful exercise one way or the

20   other.

21   You know, if you're asking me

22   if you have data only on head counts then,

23   you know, perhaps you shouldn't take that

24   next step without having the correct data

25   to do this sort of analysis.

52

1   C. ERATH

2   Q.   Could you turn to Table 17 of

3   the Goldstein Scherbaum report, which is at

4   Page 43, and the corrected table and the

5   rebuttal report, which is Table 6. Have

6   you found them?

7   A.   I am looking at Table 6 in the

8   rebuttal report. The -- I'm sorry, you

9   said -- oh, Table 17?

10   Q.   Yes.

11   A.   Got you, yeah, I have them.

12   Sorry.

13   Q.   Okay. These tables report the

14   average salary per hour of fire department

15   and Department of Building inspectors, both

16   new hires and incumbents, is that right?

17   A.   That's what it says.

18   Q.   In your report, you don't state

19   any disagreements with any of these

20   numbers, is that correct?

21   A.   I think I have a fairly large

22   disagreement with the entire concept.

23   Q.   And we will get to that. But

24   in terms of the math, did you have a

25   disagreement with any of the numbers?

53

```
 1                    C. ERATH

 2        A.    I did not try to replicate

 3   them.

 4        Q.    Did you look at their coding

 5   that was produced to you or produced to the

 6   city and presumably given to you to see if

 7   you thought their coding was incorrect?

 8        A.    Generally, yes.  In this part,

 9   I don't recall looking specifically at this

10   part.

11        Q.    When you say "generally, yes,"

12   what do you mean by generally, yes?  You

13   looked at the coding generally?

14        A.    Yes.  I mean, that's where I

15   gleaned, for instance, the double counting

16   problem.

17        Q.    But you didn't look at the

18   coding for this one, you are saying?

19        A.    I don't have any recollection

20   of it.  I may have.

21        Q.    So as far as you know now, the

22   differences per hour between the average

23   salary of fire department and Department of

24   Building inspectors, new hire inspectors,

25   that they report are correct?
```

54

```
 1                        C. ERATH

 2              MS. CROUSHORE:  Objection.

 3       A.    I don't know one way or the

 4  other.

 5       Q.    And the same is true for what

 6  they report in terms of incumbent

 7  inspectors, that you don't know one way or

 8  another whether the figures are correct?

 9       A.    I did not attempt to verify

10  them.

11       Q.    Now, part of your critique is

12  that Drs. Goldstein and Scherbaum did not

13  consider the value to fire protection

14  inspectors if they did not work a 40-hour

15  week, is that correct?

16       A.    Part of it, yes.

17       Q.    And I am going to discuss that

18  later, but I want to focus for now on their

19  efforts to compare pay, salary.

20              Do you agree that in comparing

21  salaries, it was proper for them to convert

22  salaries to their hourly rates?

23       A.    So in answering that question,

24  contingent on some value being given to

25  that sort of comparison, you're asking me
```

55

```
 1                    C. ERATH

 2   would -- if I have to do that, would I use

 3   salary or an hourly rate?

 4        Q.    Yes.

 5        A.    In -- with that constraint, the

 6   hourly rate is superior, although you would

 7   want to look at what people are actually

 8   paid, which is not what they do.

 9        Q.    And by what people are actually

10   paid, including other types of pay beyond

11   salary, is that right?

12        A.    Yes.

13        Q.    But if I understood your

14   answer, if you were to try to compare

15   salaries, you believe it would be

16   appropriate to convert to hourly rate, as

17   they did?

18        A.    You omitted both of my caveats

19   there.  But putting them back in, it is

20   better to look at an hourly rate than

21   salaried rate -- than a salary.  But again,

22   subject to what we -- what I mentioned in

23   my previous answer.

24        Q.    With the caveats that you have

25   expressed, in this case, did Drs. Goldstein
```

56

```
 1                       C. ERATH

 2   and Scherbaum do the conversion from salary

 3   to hourly rates correctly?

 4        A.    I did not check that.

 5        Q.    If you look at rebuttal report,

 6   Table 6 you will see that Drs. Scherbaum

 7   and Goldstein present the average salary

 8   for new hires, then incumbents for the fire

 9   department and Department of Buildings in a

10   difference per hour and then finally

11   statistical significance.  Do you see that?

12        A.    Those are the column heads.

13        Q.    And did you attempt to

14   replicate their calculations of whether the

15   differences were statistically significant?

16        A.    No.

17        Q.    They determined statistical

18   significance using T-tests, one for new

19   hires and one for incumbents, is that

20   correct?

21        A.    I see them talking about an

22   analysis of variants.

23        Q.    Was that the discussion of the

24   analysis of variants in connection with

25   rebuttal Table 6 or the analogous Table 17
```

57

1   C. ERATH

2   in the original report?

3   A.   Yeah, I'm looking at the

4   original report.

5   Q.   Is an analysis of variants a

6   T-test?

7   A.   It's a relative of T-tests.

8   Q.   Is that an appropriate type of

9   methodology to compare average salaries of

10   two groups, given your caveats?

11   A.   A T-test?

12   Q.   Yes.

13   A.   If you're not trying to take

14   any other characteristics into account, if

15   you're -- you're basically assuming there

16   are no other relevant factors, so I should

17   just compare average A to average B, then

18   yes, a T-test is fine.

19   Q.   Did you review their

20   programming to determine whether they

21   performed the T-test correctly?

22   A.   No.

23   Q.   One of your caveats, one of

24   your criticisms, is that they were asked to

25   analyze compensation, and they analyzed

58

```
 1                    C. ERATH

 2   only differences in base salary, is that

 3   correct?

 4        A.    I'm not sure what you're asking

 5   me, but I do say, yes, they should have

 6   looked beyond base salary.

 7        Q.    And you refer in your report to

 8   length of service as length of service,

 9   bumps in pay as one of those other types of

10   payment, is that correct?

11        A.    That is correct.

12        Q.    And you don't identify any

13   others, but you say there are some other

14   lesser payments, is that also right?

15        A.    I believe so.

16        Q.    You don't include in your

17   report any analysis of these other pay

18   components, do you?

19        A.    I do not.

20        Q.    Did you form any analysis on

21   these other types of pay components to see

22   if there were disparities between FDNY and

23   DOB inspectors in the amount they received?

24        A.    No.

25        Q.    Both fire department and
```

59

1   C. ERATH

2   Department of Building inspectors can

3   qualify for length of service and other

4   types of bumps in pay, is that right?

5   A.   Yes.

6   Q.   Do you know as you sit here

7   today whether fire department or Department

8   of Building inspectors on average

9   receive -- which of these received more in

10   these types of pay components?

11   A.   I do not.

12   Q.   So if Department of Building

13   inspectors will now receive more than fire

14   department inspectors in these types of

15   increases on average, it would increase the

16   compensation differentials, whereas if it

17   went the other way it would decrease them,

18   is that right?

19   A.   I'm struggling with your use of

20   compensation differentials. If you're

21   talking about increasing or decreasing what

22   Goldstein and Scherbaum find, yes, then I

23   agree.

24   Q.   So if you had been asked to

25   analyze whether there were disparities in

60

1   C. ERATH

2   pay between fire protection inspectors and

3   Department of Building inspectors, you

4   certainly would have looked at salary as

5   stated, isn't that correct?

6   A.   Yes, salary would be a

7   component of -- of a proper analysis.

8   Q.   And you also would have looked

9   at these other components, is that right?

10   A.   These other components being?

11   Q.   Length of service and these

12   other lesser pay implements.

13   A.   I certainly would have

14   considered all elements of compensation.

15   MS. CROUSHORE: I object to the

16   form of that question.

17   Q.   So if you were tasked with

18   doing this, how could you have integrated

19   the differences in pay with these -- I'm

20   sorry, differences in salary with these

21   other types of pay increments?

22   MS. CROUSHORE: Objection.

23   A.   Not sure what -- I'm not sure

24   what you're asking.

25   Q.   If you had been asked to

61

```
 1                      C. ERATH
 2   analyze whether fire protection inspectors
 3   or Department of Building inspectors were
 4   paid more or whether they were paid the
 5   same, and you knew that both of them
 6   received salaries and both received these
 7   other types of increments in pay, how would
 8   you have gone about integrating these
 9   different types of pay to determine whether
10   fire protection inspectors or Department of
11   Building inspectors were paid more?
12              MS. CROUSHORE:  Objection.
13       A.     Presuming you saw some value in
14   such an analysis, you could take a look at
15   each of the other components of pay beyond
16   salary and make a decision whether those
17   should be included or not.
18       Q.     And what would you base your
19   decision on whether they should be included
20   or not?
21       A.     Hard to say in abstract.
22   Something like longevity differentials that
23   are, as I understand it, automatic per the
24   collective bargaining agreement.  I think
25   if there's an assignment differential that
```

62

```
 1                    C. ERATH
 2   a small fraction of people in one job
 3   receive for, you know, a very different
 4   sign-up than everybody else does, perhaps
 5   not.  But, you know, you would have to take
 6   a look at each one.
 7       Q.   Did you look at all the
 8   relative importance of salary compared to
 9   these other components in total
10   compensation?
11            MS. CROUSHORE:  Objection.
12       A.   No.
13       Q.   So you don't know whether these
14   other components comprise ten percent of
15   total compensation or one percent or what
16   it might be?
17       A.   I mean, we would have to talk
18   about defining what you mean by total
19   compensation in -- to answer that question.
20   But I didn't perform any sort of
21   mathematical calculation to say, you know,
22   there's this much in differentials, that
23   much in salary, that much in benefits or
24   anything along those lines.
25       Q.   Do you know whether the average
```

63

```
 1                    C. ERATH

 2  length of service and other pay components

 3  was less than two percent of the average

 4  compensation and salary?

 5              MS. CROUSHORE:  Objection.

 6      A.    I do not.

 7      Q.    You do agree though, don't you,

 8  that salary was a much larger component of

 9  pay than these other forms of compensation?

10      A.    If you're speaking of the

11  differential such as the longevity

12  differential, yes, salary is certainly

13  larger than those differentials.

14      Q.    But again, you don't know how

15  much larger?

16      A.    Correct.

17      Q.    Do you have any basis for

18  believing that if Drs. Goldstein and

19  Scherbaum have factored in longevity and

20  other differentials into their salary

21  analysis, that their findings of

22  statistically significant pay differences

23  between fire department and DOB inspectors

24  would have changed?

25      A.    I don't know one way or the
```

64

1   C. ERATH

2   other.

3   Q.   Let's turn to Table 8 in the

4   rebuttal report.

5   Did you attempt to replicate

6   any of the numbers in Table 8?

7   A.   No.

8   Q.   Or to determine whether

9   Drs. Goldstein's and Scherbaum's

10   calculations at the disparities were

11   statistically significant were correct?

12   A.   I did not attempt to replicate

13   the numbers in this table.

14   Q.   Or the statistical significance

15   determinations?

16   A.   That's right.

17   Q.   In their original report,

18   starting at Page 46, don't Drs. Goldstein

19   and Scherbaum start to describe a multiple

20   regression analysis that they performed?

21   A.   They say so, yes.

22   Q.   And they report the results of

23   that multiple regression analysis in Table

24   20 on Pages 47 and 48?

25   A.   That is what they say.

65

1   C. ERATH

2   Q.   And they also have corrected

3   numbers for that multiple regression

4   analysis in Table 9 of their rebuttal

5   report, is that correct?

6   A.   Yes.

7   Q.   Did you review the programming

8   for the multiple regression analysis?

9   A.   No.

10   Q.   Did you attempt to replicate

11   any of the figures?

12   A.   No.

13   Q.   Now, you state in your report

14   that they made no attempt to take education

15   or pre-New York City or pre-FDNY DOB

16   experience into account, is that right?

17   A.   Yes.

18   Q.   Did you perform a multiple

19   regression that did take education into

20   account?

21   A.   No.

22   Q.   Or take pre-New York City

23   experience into account?

24   A.   No.

25   Q.   To the best of your knowledge,

66

1   C. ERATH

2   does New York City maintain a fully

3   populated electronic record of educational

4   achievements of FDNY and DOB inspectors?

5   MS. CROUSHORE: Objection.

6   A.   I have not seen it.

7   Q.   Given your work in other cases

8   for the City of New York, including the

9   Richardson case, do you have any knowledge

10   as to whether they -- the city maintains a

11   fully calculated record of educational

12   achievements?

13   MS. CROUSHORE: Objection.

14   A.   I don't know of such a

15   database.

16   Q.   Or even one that's halfway --

17   are you aware of any electronic database

18   that the city maintains concerning

19   education that's even halfway populated?

20   MS. CROUSHORE: Objection.

21   A.   I am not.

22   Q.   How do you propose that

23   Drs. Goldstein and Scherbaum should have

24   taken educational achievements into

25   account?

67

```
 1                      C. ERATH

 2        A.    They should have included it in

 3   their model.

 4        Q.    And without electronic data,

 5   how were they supposed to include it in

 6   their model?

 7              MS. CROUSHORE:  Objection.

 8        A.    They could have sought the

 9   information from hard copy for a random

10   sample of the people involved, for

11   instance.

12        Q.    Short of that type of effort,

13   are you aware of any other means that they

14   could have employed to include education in

15   their model?

16              MS. CROUSHORE:  Objection.

17        A.    I believe the city does have

18   partial information on education, as you've

19   alluded to, so they could have sought to do

20   something along -- using those data.

21        Q.    What types of controls does the

22   city have to determine whether the

23   information in that electronic record or

24   set of electronic records is correct?

25              MS. CROUSHORE:  Objection.
```

68

```
 1                      C. ERATH
 2        A.     I don't know.
 3        Q.     Does New York City maintain an
 4   electronic record of pre fire department or
 5   DOB experience for fire department and
 6   Department of Building inspectors?
 7             MS. CROUSHORE:  Objection.
 8        A.     They certainly have a record of
 9   their New York City experience prior to
10   joining either of those two agencies.
11        Q.     Do they have a record of their
12   pre New York State experience?
13             MS. CROUSHORE:  Objection.
14        A.     I don't know.
15        Q.     How do you propose that
16   Drs. Goldstein and Scherbaum should have
17   taken pre New York City experience into
18   account?
19        A.     My criticism is twofold.  First
20   is, if we were to accept that those data
21   don't exist, that does not absolve them
22   from leaving out relevant factors.  But
23   secondary, again, they could have attempted
24   to calculate the -- to collect it for a
25   random sample of the people involved from
```

69

1   C. ERATH

2   some hard copy records.

3   Q.   Do you know if the DOB

4   inspectors have greater educational

5   accomplishments measured by degrees on

6   average than do fire department inspectors?

7   MS. CROUSHORE: Objection.

8   A.   I have not studied that

9   question one way or the other. The

10   educational requirements are certainly

11   different on the NOEs.

12   Q.   Do DOB inspectors have more

13   relevant pre New York City employment

14   experience than do fire department

15   inspectors?

16   MS. CROUSHORE: Objection.

17   A.   I have not studied the

18   question, but the experience requirements

19   on the NOEs are certainly different for the

20   two positions.

21   Q.   Can you look at rebuttal

22   report, Table 9. There is a column

23   entitled R squared. Do you see that?

24   A.   Yes.

25   Q.   In a multiple regression

70

1   C. ERATH

2   analysis, what does R squared signify?

3   A.   The percentage of the variation

4   independent variable that aligns with

5   variation in independent variables.

6   Q.   And what does a value of point

7   zero indicate?

8   A.   No relation.

9   Q.   And what does a value of one

10 indicate?

11   A.   Perfect correlation.

12   Q.   If one were to look at Table 9,

13 the R squareds vary from a low of point 438

14 in 2013 to a high of point 848 in 2019, is

15 that right?

16   A.   No.

17   Q.   And in what way was that

18 incorrect?

19   A.   Point 881 is bigger than point

20 848.

21   Q.   Oh, you are correct. It is

22 point 881, yes.

23   And if you turn to Table 10,

24 which you will see that the R squareds

25 range from a low of point 660 up to a high

71

1   C. ERATH

2 of point 933, does that look correct?

3   A.   You have recited the low and

4 the high correctly, but the numbers are

5 largely meaningless.

6   Q.   Given these levels of

7 R squared, do you believe that including in

8 education and pre New York City experience

9 would likely change the results of whether

10 the disparities were statistically

11 significant?

12   MS. CROUSHORE: Objection.

13   A.   So the levels of R squared, as

14 I just said, are largely meaningless

15 because they're reviewing data coming out

16 of people that are paid per the terms of

17 the collective bargaining agreement, so

18 it's not really telling you very much.

19   So we know that the

20 requirements are different for -- you know,

21 both in terms of education and experience.

22 So while I haven't done the analysis, it's

23 certainly possible it would make a

24 difference.

25   Q.   When you say it's certainly

72

```
 1                    C. ERATH
 2   possible that it would have made a
 3   difference, do you believe that it is
 4   probable more likely than not that it could
 5   make a difference?
 6        A.    I have not done the analysis,
 7   so I don't know.
 8        Q.    As you sit here, since you
 9   haven't done the analysis, you have no way
10   of knowing whether that possibility is
11   point 001 or point 99, is that correct?
12        A.    Well, if I had done it, I would
13   know one way or the other, so we -- it
14   would be in the realm of possibilities.
15   Since I haven't done it, I don't know the
16   answer.
17        Q.    And you don't have any
18   understanding of how likely it is that it
19   would make a difference?
20        A.    I mean, I know there's likely
21   to be a difference in education and
22   experience given the difference in
23   requirements.  So would it make a
24   difference?  Almost certainly, I would say.
25   How much of a difference is much harder to
```

73

1   C. ERATH

2   quantify.

3   Q.   And whether it would make a

4   difference in the completion that the

5   results were statistically significant you

6   do not know?

7   A.   I do not know.

8   I wouldn't mind another break

9   when you reach a convenient stopping point.

10   Q.   Why don't we take a break now.

11   It is 12:10. Did we want to break until

12   12:20?

13   MS. CROUSHORE: That's fine

14   with me.

15   THE WITNESS: Sure.

16   MR. LIEDER: Okay.

17   MS. CROUSHORE: Thanks.

18   MR. LIEDER: Off the record.

19   (Whereupon, a short recess was

20   taken.)

21   Q.   Dr. Erath, before we took a

22   break, we were talking about the multiple

23   regression analyses that are reported in

24   Tables 20 and 21 in the original report and

25   Tables 9 and 10 in the rebuttal report.

74

```
 1                    C. ERATH

 2            In the analysis reported in

 3   Table 9, it's correct that Drs. Goldstein

 4   and Scherbaum controlled for whether

 5   someone was a new hire or incumbent and

 6   time in job, is that right?

 7        A.    So they said.

 8        Q.    And in the analysis as

 9   reflected in rebuttal Table 10, they also

10   include indicators for job title among the

11   Department of Building jobs, is that right?

12        A.    Yup, so they say.

13        Q.    In your report, you state that

14   time and current job has little relevance

15   under the collective bargaining agreements

16   other than they move from new hire to

17   incumbent after two years, is that right?

18        A.    Yes.

19        Q.    Although you say it has little

20   relevance, do you see something wrong in

21   controlling for time and job?

22        A.    It's not specified in that it's

23   leaving out things that are relevant and

24   putting in things known not to be relevant,

25   so I think that's the major problem.
```

75

1   C. ERATH

2   Q.   And when you say it's leaving

3   out things known to be relevant, are you

4   talking about education and pre New York

5   City experience?

6   A.   We could talk about that, but

7   what I had specifically in mind was, we

8   know the form of -- or the way in which

9   time and title matters. It matters to the

10 longevity. We discussed differentials,

11 we've been discussing.

12   So there's no debate about how

13 longevity affects compensation. We can

14 read it right out of the collective

15 bargaining agreement. So to specify

16 otherwise as if there's a combined effect

17 across the -- the -- the two jobs is a

18 misspecification and therefore an error.

19   Q.   Now, isn't it the case that at

20 the Department of Buildings, people may get

21 pay increases that are not specified in the

22 collective bargaining agreement?

23   A.   Yes.

24   MS. CROUSHORE: Objection.

25   Q.   And isn't it likely that the

76

 1   C. ERATH

 2   longer that one is there, the more likely

 3   it is that someone will have received such

 4   an increase?

 5   A.   I don't know if that's true or

 6   not.

 7   Q.   Isn't it likely that someone

 8   who has been there eight years is more

 9   likely to have received an increase than

10   someone who's been there two years?

11   MS. CROUSHORE: Objection.

12   A.   I assume we're not talking

13   about longevity increases here. I would

14   certainly agree with you for longevity

15   increases. The other increases, I don't

16   know the basis for which they are granted

17   and whether it has anything to do with the

18   length of service.

19   Q.   Well, the dependent variable

20   here -- and I know that you disagree with

21   this -- but the dependent variable is

22   salary, isn't that right?

23   A.   That is right.

24   Q.   So the longevity increments

25   aren't relevant, are they, to salary?

77

```
 1                    C. ERATH

 2        A.    You are correct.  I had

 3   forgotten that the Goldstein and Scherbaum

 4   model omitted that component of pay, which

 5   makes the misspecification more severe.

 6        Q.    Given that the dependent

 7   variable was salary or actually hourly pay

 8   rather than salary, it wouldn't have made

 9   sense to specify when the longevity

10   increments were realized, isn't that true?

11        A.    Conditional on ignoring them

12   then yes, you don't need to specify.  But

13   again, the model remains misspecified by

14   including something that has little or

15   nothing to do with the salary.

16        Q.    During your career, have you

17   analyzed pay disparities between two groups

18   of employees in situations where there

19   wasn't a collective bargaining agreement?

20        A.    Where there was not a

21   collective bargaining agreement?

22        Q.    Yes.

23        A.    Yes, I have.

24        Q.    And in any of these analyses,

25   have you controlled for time and job?
```

78

1   C. ERATH

2   A.   I have.

3   Q.   Even though there is no

4   collective bargaining agreement, so there

5   is no time where it is dictated when an

6   increase will occur, is that right?

7   A.   In the absence of a collective

8   bargaining agreement, I suppose it's

9   possible there could be such a time, but

10 it's not typical.

11   Q.   Other than the increase after

12 two years from new hire to incumbent, the

13 collective bargaining agreements in this

14 case do not specify when individuals are to

15 receive increases in salary, do they?

16   A.   Setting the longevity

17 differentials aside, that's right.

18   Q.   Where the collective bargaining

19 agreement does not specify when someone may

20 get a discretionary increase, why is the

21 collective bargaining agreement situation

22 any different than the types of cases where

23 you control for time and job where there

24 was no collective bargaining agreement?

25   A.   I think the chief difference

79

```
 1                      C. ERATH
 2   here is for the fire protection inspectors,
 3   most of them are paid per the collective
 4   bargaining agreement at one of the two
 5   rates, and therefore, a control for time
 6   and title, particularly one that's mandated
 7   to be the same across the two agencies, is
 8   wrong.
 9        Q.    While the fire protection
10   inspectors typically are paid the
11   contractually mandated minimums, you have
12   agreed that the Department of Building
13   inspectors are not, isn't that right?
14             MS. CROUSHORE:  Objection.
15        A.    I agree that the building
16   inspectors are not always but sometimes
17   paid an amount above the minimum listed in
18   the collective bargaining agreement.
19        Q.    And don't you think it's likely
20   that someone who has been there six years
21   is more likely to have received such an
22   increase than someone who's been there
23   three years?
24             MS. CROUSHORE:  Objection.
25        A.    I --
```

80

```
 1                     C. ERATH

 2        Q.    Any time within their career,

 3   someone who's been there six years is more

 4   likely to have received an increase on

 5   average than someone who's only been there

 6   three years on average, isn't that right?

 7             MS. CROUSHORE:  Objection.

 8        A.    I don't know one way or the

 9   other.  Doesn't change the fundamental in

10   the specification.

11        Q.    And what's the fundamental in

12   this specification?

13        A.    Failing to note that the -- for

14   fire protection inspectors, the time and

15   title is largely meaningless, and yet

16   setting up the model affects the mandate

17   for it to be the same for both agencies.

18        Q.    So you believe it was a

19   misspecification and therefore incorrect

20   for them to have controlled for time and

21   job beyond the two-year increment where

22   there was the increase from new hire to

23   incumbent, is that correct?

24        A.    As they have put it in the

25   model, it's clearly a misspecification.
```

81

                              C. ERATH

1

2   Q.   When you say as they have put

3   it in the model, what could they have done

4   differently that you think would not have

5   been a misspecification?

6   A.   For this particular issue we've

7   been discussing, time and title, they could

8   have used an interaction in turn between

9   the agency and the time and title.

10   Q.   Is it your understanding that

11   the Goldstein and Scherbaum Tables 22

12   through 26 are analogous for

13   associate-level inspectors to Tables 17

14   through 21 for inspectors?

15   MS. CROUSHORE: I'm sorry,

16   Mike, could you please repeat that?

17   I'm not sure I followed the question.

18   Thanks.

19   MR. LIEDER: Yes.

20   Q.   Did you understand that

21   Drs. Goldstein and Scherbaum ran the

22   analogous analyses for associate-level

23   inspectors that they did for inspectors and

24   that they report the results in Tables 22

25   through 26?

82

1   C. ERATH

2   A.   That appears to be the case.

3   We know there's some issues with the title

4   designations that -- we're talking about

5   the original report, right?

6   Q.   Right.

7   A.   So -- but yes, it appears that

8   they are going through the same sequence.

9   Q.   And they then report the

10 corrected tables at 11 through 15 to take

11 into account the double counting, is that

12 right, Tables 11 through 15 of the rebuttal

13 report?

14   A.   It's a little hard to tell.

15 Eleven doesn't have a heading on it as to

16 whether it's associates or not, but I will

17 take your word for it.

18   Q.   Do you have any issues with the

19 Tables 22 through 26 for associate-level

20 inspectors for -- in the rebuttal report 11

21 through 15 that are unique to the

22 associate-level inspectors and weren't

23 raised also with respect to inspectors?

24   A.   Well, in the original report,

25 we have a counting issue that compounds

83

1   C. ERATH

2   certainly the last few years and affects a

3   couple of other years as well. But my

4   understanding is that they're using the

5   same methodology, so the same criticisms

6   apply.

7   Q.   Then we don't need to go

8   through those.

9   You criticize, Page 6 of your

10   report, their analyses for being static.

11   Do you remember that?

12   A.   Yes, I do.

13   Q.   And is it correct that you

14   raise two different types of critiques of

15   their report as being static; one is that

16   they haven't considered the number of years

17   it takes to qualify for the inspector

18   position, and the second is they haven't

19   taken into account the likelihood of being

20   promoted to the associate level, is that

21   correct?

22   A.   Yeah, broadly.

23   Q.   When you say broadly, did I

24   misstate it in some way?

25   A.   No, the second I think you're

84

1   C. ERATH

2   right, that the likelihood of promotion is

3   certainly what I was thinking of there.

4   You know, the first is what I had in mind

5   when I said broadly, which is more we're

6   just talking about the -- the timing given,

7   their qualifications. If that's what you

8   meant, then we should be fine.

9   Q.   Let's start with the first.

10 You state that in the first paragraph on

11 Page 6 there are obvious differences in the

12 time required to meet the listed

13 qualifications. From the first listed

14 qualifications, construction inspectors

15 require five years of experience and FPIs

16 three. Meeting requirements in three years

17 instead of five allows a candidate to begin

18 earning sooner and move to the incumbent

19 rate sooner.

20   In your report, earlier in your

21 report, don't you show that the amount of

22 time it takes to meet the minimum

23 qualification changed for construction

24 inspectors?

25   A.   I think both -- both positions

85

```
 1                     C. ERATH

 2   changed the requirements relatively late in

 3   the time period under consideration.

 4        Q.    In 2019 the construction

 5   inspector notice reduced the years of

 6   experience from five years to two years, is

 7   that correct?

 8        A.    That's --

 9        Q.    This is on Page 4 of your

10   report.

11        A.    Yeah, that sounds right.

12        Q.    And the FDNY requirements of

13   three years of experience was not changed,

14   was not reduced, is that correct?

15        A.    I think that's right.

16        Q.    So at least since 2019, you are

17   saying that it is at least with respect to

18   this particular requirement, it now takes

19   less time to meet the construction

20   inspector requirement than the fire

21   protection inspector requirement, is that

22   right?

23        A.    You're right, it's two years

24   versus three.  I'm not sure -- you know, we

25   have to consider that more fully 'cause the
```

86

1   C. ERATH

2   construction inspector is two years of work

3   experience as a carpenter, et cetera.

4   And I'm going to guess there's

5   some requirements ahead of time to getting

6   work as a carpenter, that no one would hire

7   me as a carpenter right now, for instance,

8   so -- but if you're asking if two is less

9   than three, the answer is yes.

10   Q.   There are actually multiple

11   ways to meet the minimum educational

12   experience or requirements for both jobs,

13   isn't there?

14   A.   Correct.

15   Q.   And you don't know how most

16   candidates who meet the requirements do so,

17   whether it is the experimental one or one

18   of the other requirements?

19   A.   I do not.

20   Q.   So you don't know, really know,

21   do you, whether it takes longer on average

22   for candidates to satisfy the fire

23   protection inspector or construction

24   inspector requirements?

25   A.   I haven't done the study. If

87

```
 1                    C. ERATH
 2   you're looking at the -- you know, the
 3   listed requirements that were in place for
 4   most of the period under consideration, it
 5   seems pretty clear that requirements are
 6   greater for the construction inspector.
 7        Q.   At least the first requirement
 8   was?
 9        A.   And the others as well.
10        Q.   We will be talking about that.
11   Now I want to switch to promotions.  And
12   first I want to make sure I understand what
13   you did.
14             First you state that you use
15   the Goldstein and Scherbaum data file, is
16   that correct?
17        A.   I don't -- I didn't use the
18   file they produced.  I used the same data
19   upon which they relied.  So I wouldn't call
20   it the Goldstein and Scherbaum data file.
21        Q.   Okay.  So you used the same
22   file that was produced by the city but not
23   any manipulations of it that they had made?
24        A.   That is right.
25        Q.   And from that file, you
```

88

```
 1                    C. ERATH

 2   identified persons who were at some time at

 3   the non-associate or lower level FPI or

 4   Department of Building inspector position,

 5   is that right?

 6        A.    The -- that's the starting

 7   point.

 8        Q.    And this is limited to the

 9   fiscal year 2005 to '20 period?

10        A.    That's right.

11        Q.    So they needed to have been at

12   the lower level at some time during the

13   2005 to '20 period?

14        A.    That's right.

15        Q.    And then you further limited

16   the universe to those who were observed for

17   at least three years, whether at the entry

18   level or associate.  And I know there's

19   also a footnote saying you could also do it

20   at one and five years but let's use the

21   three years.

22        A.    Right.  So you're exactly

23   right.  I used three in the text, relaxed

24   that assumption in other variations to see

25   if it made any difference.
```

89

```
 1                      C. ERATH

 2        Q.     So they had to have been either

 3   entry level or associate for at least three

 4   years, and they had to be an associate -- I

 5   mean a lower level -- for at some point

 6   during those three years?

 7        A.     That's right.

 8        Q.     If someone was hired at the

 9   associate construction inspector level,

10   worked for the Department of Buildings for

11   more than three years and then in the 2019

12   reorganization were reclassified as a

13   construction inspector because they

14   abolished the associate construction

15   inspector position, were those people

16   included in your universe or not?

17        A.     I don't believe so.

18        Q.     You think you excluded them?

19        A.     Yes.

20        Q.     That would have been your

21   intent anyway?

22        A.     Yes.

23        Q.     And then what you did once you

24   had created this universe is, is you

25   calculated the percentage of people in the
```

90

1   C. ERATH

2   universe who advanced to the associate

3   level?

4   A.   We classified people by whether

5   or not they advanced.

6   Q.   Now, this analysis that you did

7   applied to all fire protection inspectors

8   who meet your criteria, you didn't do, for

9   instance, separate analyses by unit within

10 the Bureau of Fire Protection?

11   A.   That's correct.

12   Q.   Your reason for looking at the

13 motions was to analyze increases in pay,

14 longitudinally or over time, is that right?

15   A.   Yes.

16   Q.   But why not also factor in

17 salary changes? Why look just at motions?

18 Why not look at salary increases?

19   A.   The changes to salary were

20 already captured in a salary analysis, so

21 I'm not sure what you're asking.

22   Q.   Well, if the issue was whether

23 employees would think that they had greater

24 opportunities to get pay increase, why not

25 include both promotional increases and

91

1   C. ERATH

2   salary increases?

3   A.   You can certainly do so.

4   Q.   The information in those files

5   included not only promotions but also

6   nonmanagerial salary changes, is that

7   right?

8   A.   What do you mean by

9   nonmanagerial? You mean other salary

10 changes aside from becoming associate?

11   Q.   Yes, so aside from a promotion.

12   A.   I think that we had all changes

13 to salary.

14   Q.   And they had a code for

15 nonmanagerial salary change, didn't they?

16   A.   I don't recall specifically

17 what it said, but my understanding is we

18 had all of the salary changes shown there.

19   Q.   Isn't it true that the files

20 reflect only two salary rate changes for

21 fire protection inspectors?

22   A.   In 15 years, there's only two

23 changes?

24   Q.   For nonpromotional salary

25 changes for fire protection inspectors?

92

```
 1                      C. ERATH
 2        A.     I don't know.
 3        Q.     And weren't there hundreds of
 4   salary changes for building inspectors,
 5   Department of Building inspectors?
 6              MS. CROUSHORE:  Objection.
 7        A.     I didn't count them, but I will
 8   agree that they are more prevalent for
 9   building inspectors.
10        Q.     If you had included in both
11   promotional changes in salary and
12   nonpromotional increases in salary, what
13   would that have done to your outcome?  Do
14   you think that fire protection inspectors
15   would have received a higher percentage
16   than did building inspectors?
17        A.     When you say outcome, the only
18   analysis I'm presenting here is, you know,
19   were you promoted, yes or no.  So are you
20   asking me if I had redefined promotion to
21   include any salary increase that's not
22   managerial?
23        Q.     Instead of looking just at
24   promotions, if you had looked at both
25   promotional increases and nonpromotional
```

93

```
 1                    C. ERATH

 2   salary increases, do you believe that the

 3   fire protection inspectors would have

 4   received a higher percentage of such

 5   increases than did building inspectors?

 6         A.    I don't know.

 7         Q.    If one were looking at

 8   opportunities over time, wouldn't it be

 9   appropriate also to look at the possibility

10   of a promotion beyond associate inspector

11   to administrative inspector?

12         A.    One can do so.

13         Q.    If one had done so, do you know

14   whether there would have been more

15   promotions at the Department of Building to

16   the administrative level than at the FDNY

17   to the administrative level?

18         A.    I don't know.

19         Q.    Do you know whether there are

20   more administrative inspectors at the

21   Department of Buildings than at the fire

22   department?

23         A.    No.

24         Q.    You don't know one way or the

25   other?
```

94

1   C. ERATH

2   A.   I do not.

3   Q.   If I were to tell you that in

4   every year except 2018 there were fewer

5   than ten administrative fire protection

6   inspectors but between 37 and 52

7   administrative inspectors, would you

8   believe that there would probably be more

9   promotions to administrative inspector at

10   the Department of Buildings than the fire

11   department?

12   MS. CROUSHORE: Objection.

13   A.   Then you would also have to

14   tell me to assume that there would be --

15   those promotions only come from

16   associate -- respective associate category;

17   otherwise, I can't answer it one way or the

18   other. But as I said, I don't know the

19   numbers.

20   Q.   You also criticize

21   Drs. Goldstein and Scherbaum for not

22   factoring into compensation nonpecuniary

23   aspects of their jobs. Do you remember

24   that?

25   A.   Yes.

95

```
 1                    C. ERATH
 2       Q.    Did you attempt to value
 3  nonpecuniary aspects of the job of fire
 4  department inspectors or building
 5  inspectors in this case?
 6       A.    No.
 7       Q.    Have you ever attempted to do
 8  so in any case?
 9       A.    The one that comes up with some
10  frequency is valuing time off -- actually,
11  that's not right.  There are various fringe
12  benefits that come up as well.
13       Q.    What types of fringe benefits
14  are you thinking of that are nonpecuniary
15  in nature?
16       A.    Generally speaking, insurance
17  benefits would be the primary benefit
18  there.
19       Q.    And you would consider that
20  nonpecuniary?
21       A.    Yes.
22       Q.    How do you go about valuing
23  time off?  Let me rephrase that.  Have you
24  ever valued time off?
25       A.    Not with a specific value, more
```

96

1   C. ERATH

2   of bounding approach.

3   Q.   What do you mean by bounding

4   approach?

5   A.   Setting an upper and a lower

6   bound on possible value, putting a

7   reasonable range upon it.

8   Q.   And how do you go about putting

9   reasonable ranges on the value of time off?

10   A.   You look at -- at economic

11   studies that address that question. So

12   they are most typically done through,

13   willing to pay for certain activities or

14   for time off where they will look at how

15   people face choices and the outcomes of

16   those choices and try to quantify it based

17   on -- on that sort of approach.

18   Q.   Can you identify for me cases

19   in which you have valued or determined a

20   range of values for time off, as you were

21   just describing?

22   A.   Not off the top of my head.

23   Q.   Do you know whether you have

24   included such an analysis in a written

25   report?

97

```
 1                    C. ERATH
 2       A.    Ever?
 3       Q.    Yes.
 4       A.    I'm sure it's come up.
 5       Q.    Have you ever done such an
 6  analysis in a case in which you were
 7  representing the City of New York, not
 8  representing, engaged as an expert for the
 9  City of New York?
10       A.    I do not believe so.
11       Q.    Could you go back to your CV
12  and the list of cases shown on Page 3 of
13  your CV and look through that list of cases
14  and tell me whether in any of those cases
15  you have done such an analysis determining
16  the bounds of the value of time off?
17       A.    I don't believe so.  Most of
18  the ones listed here are FLSA cases where
19  it wouldn't be relevant consideration,
20  along with a couple of ways to speed
21  arbitrations where again, it wouldn't come
22  up.
23            So it would really only be the
24  economic loss cases we're looking at here,
25  and I don't think any of these involved
```

98

```
 1                    C. ERATH
 2   time off.
 3        Q.    And when you say time off, what
 4   do you encompass within the phrase "time
 5   off"?
 6        A.    It could either be paid time
 7   off, you know, something like a vacation
 8   benefit, or a shorter work schedule, so
 9   either formal or informal time off.
10        Q.    If you look at your third case
11   down, Pfeil versus LabCorp, you describe
12   the case as dealing with economic loss in a
13   wrongful termination matter.
14              Do you see that?
15        A.    Yes.
16        Q.    And in that case, were you
17   representing or working as the expert for
18   the plaintiff or the defendant?
19        A.    Defendant.
20        Q.    And termination is in effect
21   the ultimate time off.  Did you in that
22   case attempt to place a value on the time
23   off of the plaintiff?
24        A.    I do not believe so.
25        Q.    Why not?
```

99

```
 1                    C. ERATH
 2       A.    I think there's a difference
 3  between working a shorter schedule and
 4  losing your job.
 5       Q.    Losing your job would give you
 6  a lot of time off, wouldn't it?
 7       A.    In the short run.
 8       Q.    Aside from time off or fringe
 9  benefits, such as insurance, have you
10  attempted to place a value or a range of
11  value on nonpecuniary aspects of employees'
12  jobs?
13       A.    I can't think of an example
14  beyond those.
15       Q.    Are you aware of any labor
16  economist who has proposed a means of
17  valuing the nonpecuniary aspects of an
18  employee's job other than time off or
19  fringe benefits, such as insurance?
20       A.    I mean, the most direct
21  examples you would find in any textbook is
22  the danger of the job that you find all
23  over the compensating differentials
24  literature.
25            And then there are analogous
```

100

1   C. ERATH

2   studies looking at, you know, various

3   safety aspects as well as, you know,

4   looking at the other way the, you know,

5   positive benefits where you're trying to

6   put a value on the -- based on the, you

7   know -- the difference in the market wage.

8   Q.   You quote testimony from

9   plaintiff Darren Connors in which he

10   testified about reluctance to work as a

11   building inspector because of inspectors'

12   reputations of taking bribes.

13   Do you remember that?

14   A.   I remember -- I don't remember

15   if he was the one who said about the

16   bribes, but he certainly said there was a

17   difference in the reputation, I think was

18   his word, of the two agencies.

19   Q.   How would you go about trying

20   to value that difference in reputation of

21   the two agencies?

22   A.   I mean, it's difficult in the

23   context of this lawsuit because -- which I

24   assume is your question, you know, because

25   you would expect those sorts of things to

101

1   C. ERATH

2   be included in a wage rate. So we end up

3   in a circular mess if we try to do it here,

4   you know, in the abstract.

5   You know, if we're not engaged

6   in litigation, then you could look at the

7   relative wage rates, you know, akin to the

8   Adam Smith quote I have where he says the

9   wages are expected to vary with the

10   honorableness, in a word, of the

11   employment.

12   Q.   But that would involve simply

13   assuming that any difference in wages was

14   that you couldn't otherwise attribute

15   values to, was attributable to these types

16   of nonpecuniary aspects of the job?

17   A.   I mean, presumably if you're

18   doing a scientific study you're -- you're

19   trying to look at a number of different

20   occurrences. You wouldn't just look at,

21   you know, A versus B. You would try to get

22   an idea of what is typical -- you know,

23   what is the typical market differential for

24   these sorts of reputational events.

25   Q.   Are you aware of any such

102

```
 1                    C. ERATH

 2   analysis?

 3        A.    No, but I haven't looked for

 4   it.

 5        Q.    And you certainly aren't aware

 6   of any analysis based on reputation of the

 7   fire department and the Department of

 8   Buildings, is that right?

 9        A.    That is right.

10        Q.    So one of the nonsalaried

11   differences you mentioned or nonpecuniary

12   differences you mentioned, as we talked

13   about, is that FPIs have enjoyed either

14   five or two and a half additional hours per

15   week off from work, is that right?

16        A.    Yes, five for much of the time,

17   two and a half at the end.

18        Q.    And you state that

19   Drs. Goldstein and Scherbaum are

20   understating the compensation of fire

21   protection inspectors by not valuing those

22   hours.  That would be at the bottom of Page

23   5, the last sentence of the second-to-last

24   paragraph.

25        A.    I see it.
```

103

```
 1                    C. ERATH
 2       Q.    So in this case, how should
 3   they have gone about putting a value on
 4   that two and a half to five additional
 5   hours of time off per week?
 6       A.    Again, they could have appealed
 7   to the literature on the value of free
 8   time.
 9       Q.    Does that literature place a
10   value on free time that is equal to the
11   value of the extra compensation that the
12   employees would have received if they had
13   worked the two and a half or five hours?
14       A.    I'm not sure what you're
15   asking.
16       Q.    Well, let's say that if the
17   fire protection inspectors had worked an
18   additional two and a half or five hours per
19   week, they would have been paid at the same
20   hourly rate that they had been earning but
21   now get that in addition, so they get an
22   increase in their pay.
23            How does the literature compare
24   that additional value in terms of money
25   paid against the value of the time off?  Is
```

104

```
 1                    C. ERATH
 2   the time off equal to that value?
 3        A.    I'd have to look back and be
 4   sure, but my -- I don't know.  I haven't
 5   looked recently, so I had better not answer
 6   it.  I mean, the point I'm making here is
 7   there's obviously some value to the
 8   flexibility of not having to work those
 9   hours on a week-to-week basis.
10        Q.    But you aren't opining as to
11   what that value is?
12        A.    That's right.
13        Q.    And you aren't opining as to
14   whether it's equal to the extra money that
15   the individuals might have received if they
16   had worked that extra two and a half or
17   five hours?
18        A.    I am not opining as to the
19   value.
20        Q.    Would it change your analysis
21   in this case if hypothetically the union
22   for the fire protection inspectors had
23   bargained for a 40-hour week in 2015 to '16
24   and the 37 and a half hours represented a
25   compromise?
```

105

```
 1                    C. ERATH

 2        A.    No.

 3        Q.    Would it change your analysis

 4   in this case if hypothetically the pay of

 5   the FPIs increased in 2016 at the rate

 6   equal to the extra hours times their hourly

 7   rate?

 8        A.    You're talking about the salary

 9   here?

10        Q.    Yes.

11        A.    I mean, that has nothing to do

12   with the value of the flexibility of the

13   additional time off.

14        Q.    If the union were bargaining

15   for a full 40-hour week, wouldn't it

16   indicate to you that at least the union

17   representing the workers thought that there

18   was more value to actually having the

19   people working and getting more salary than

20   having more time off?

21             MS. CROUSHORE:   Objection.

22        A.    Impossible to say from what

23   you've told me 'cause, you know, collective

24   bargaining is rarely a one-issue

25   proposition.
```

106

```
 1                    C. ERATH

 2       Q.    Now I asked you near the start

 3  of the deposition as we were going through

 4  your reliance material about the

 5  recruitment brochure that you mention in

 6  the last paragraph on Page 5.

 7            And you say in that paragraph

 8  that the brochure for FPIs advertises that

 9  FPIs work only 37.5 hours and are not

10  required to work weekends?

11            Does the brochure include the

12  word only?

13       A.    I don't think so.

14       Q.    So do you think that the

15  brochure is trying to advertise 37.5 hours

16  as a good thing, something to be desired,

17  or merely a statement of what their regular

18  schedule is?

19       A.    We have the next clause that

20  you don't have to work weekends.  That

21  would indicate that whoever wrote the

22  brochure has in mind the -- that your work

23  schedule will be a good one.  But I can't

24  speak to what the author had in mind beyond

25  that.
```

107

1   C. ERATH

2   Q.   And does the brochure use the

3   words "you're not required to work

4   weekends"?

5   A.   That I don't remember.

6   MS. CROUSHORE: Objection.

7   Q.   You said you don't remember?

8   A.   I don't remember the specific

9   wording, but I recall the weekends not

10   on -- on the schedule part of it.

11   Q.   Do you know whether FPIs do, in

12   fact, work weekends sometimes?

13   A.   I'm not certain. I believe I

14   saw that in there but I would have to

15   double-check.

16   Q.   And do you know whether they

17   work weekends more or less frequently than

18   DOB inspectors?

19   A.   I don't know.

20   Q.   And I take it you have no idea

21   what percentage of FPIs would have

22   preferred the higher pay associated with

23   the 40-hour week over having either a 37.5

24   or a 35-hour week?

25   A.   I don't know.

108

1   C. ERATH

2   MR. LIEDER: I see Amanda just

3   sent me the brochure, so let's look

4   at it. Did you also send this to

5   Dr. Erath or does Dr. Erath have it?

6   MS. CROUSHORE: He has it, but

7   I will send it to you again just so

8   we are all looking at the right one.

9   Q.   Dr. Erath, do you have a copy

10   of this brochure?

11   A.   It just came through.

12   Q.   Okay.

13   A.   I just opened it up.

14   Q.   You will see at the bottom of

15   the first page that there is a copyright of

16   2020?

17   A.   Yes.

18   Q.   So from that you would infer

19   that this was issued in 2020?

20   A.   I would.

21   Q.   And then above that, in best in

22   class benefits, it says 37.5 hour workweek

23   with paid holidays. Inspectors are not

24   required to work on weekends.

25   That's what you were looking

109

1   C. ERATH

2   at?

3   A.   That's right.

4   Q.   And on 37.5 hours, it doesn't

5   say only, does it?

6   A.   It does not.

7   MR. LIEDER: Okay. Why don't

8   we take a lunch break. Let's go off

9   the record and figure out when we

10   should get back.

11   (Whereupon, a luncheon recess

12   was taken at 1:20 p.m.)

13

14   A F T E R N O O N   S E S S I O N

15

16 CONTINUED EXAMINATION BY

17 MR. LIEDER:

18   Q.   Dr. Erath, before we go to the

19 next topic, I wanted to revisit one area

20 from this morning.

21   If you remember, we looked at

22 the fact that nine of the ten cases that

23 you list as the most recent in which you

24 have testified were for the City of New

25 York.

110

1   C. ERATH

2   And I asked you about what type

3   of division you thought there was in your

4   testifying work between your work for the

5   city and your work for other clients, and

6   you said roughly 50/50.

7   Do you remember that?

8   A.   I don't remember you asking

9   about testifying work. I remember you

10   asking me about expert work.

11   Q.   Okay. You are right. I guess

12   there could be expert work that's

13   nontestifying. That's what I wanted to

14   know.

15   Without necessarily revealing

16   your clients, what other type of expert

17   work are you doing that balances out the

18   testifying work that you are doing for the

19   city?

20   A.   So the -- the distinction I was

21   drawing -- and I apologize if that wasn't

22   what you were looking for -- was there are

23   a number of cases for which I'm hired as an

24   expert, perhaps even intended to be a

25   testifying expert, but it never gets there

111

1   C. ERATH

2   because the case revolves in one way or the

3   other.

4   So that's the preponderance of

5   what I'm talking about that, at least as

6   far as I know.

7   It's also the case that a

8   number of assignments I'm engaged and

9   nobody ever says specifically, you know,

10   you are going to testify or we intend for

11   you to testify, and I may -- it may seem

12   that way to me, but that doesn't seem to be

13   the necessary question to address in the

14   first conversation.

15   Q.   So when you testified that your

16   expert work was roughly 50/50 between the

17   city and other clients, you were including

18   among the work for other clients these

19   types were situations where you are engaged

20   but are never testifying?

21   A.   Right, there's some pieces of

22   litigation involved, but for whatever

23   reason I don't end up testifying.

24   Q.   And in some of those cases, do

25   you prepare reports and then you don't

112

```
 1                    C. ERATH
 2   testify in a deposition, or does it never
 3   even get to a report?
 4        A.    Some of those.  You know,
 5   frequently I do a report, but that's the
 6   last I'll hear of it.  Others there is
 7   actually a -- a deposition.  But not at all
 8   uncommon to not reach that stage.
 9        Q.    I would like you to go back to
10   your report, Exhibit 1, Page 2.  At the
11   bottom of Page 2, you write that you
12   obtained data showing exams applied for by
13   those who held an FPI position during the
14   2005 to '20 period studied by
15   Drs. Goldstein and Scherbaum.
16              And we talked a little bit
17   about this this morning in connection with
18   your list of materials on which you rely.
19   I know you said you don't know who prepared
20   data.  Was it in the form of a spreadsheet?
21        A.    Yes.
22        Q.    And even if you don't know who
23   prepared it, do you know what type of
24   methodology they used to prepare it?
25        A.    Not sure what you're asking.
```

113

```
 1                    C. ERATH
 2        Q.    From what records did they
 3   obtain this information?
 4        A.    I don't know.
 5        Q.    What type of training did the
 6   persons have in obtaining or extracting
 7   this data from what may have been a larger
 8   database or spreadsheet?
 9        A.    I don't know.
10        Q.    Did you request that this type
11   of data be provided to you or was it
12   provided without a request from you?
13        A.    I requested it.
14        Q.    Did you request that the data
15   be provided before or after you received
16   Dr. Goldstein and Scherbaum's initial
17   report?
18        A.    I believe after.
19        Q.    How long after you requested
20   the information did it take for the city to
21   send it to you?
22        A.    I don't recall.
23        Q.    What type of confidence do you
24   have that the spreadsheet data is complete?
25        A.    What type of confidence?
```

114

```
 1                    C. ERATH

 2      Q.    Yes, what is your basis for any

 3   confidence that the records are complete?

 4      A.    I know counsel made the request

 5   to the keeper of the records.  I assume

 6   they would know.  Beyond that, I don't know

 7   one way or the other.

 8      Q.    What would be your basis for

 9   believing that the information that was

10   provided was accurate?

11            MS. CROUSHORE:  Objection.

12      A.    I mean, if you're asking if I

13   looked at the underlying data from which

14   they drew what's in the spreadsheet, I did

15   not.  So I used the spreadsheet as it was

16   provided to me.

17      Q.    Looking at the last full

18   paragraph of Page 2 of your report, which

19   is, actually there's a partial paragraph

20   below it.  You will see that the first

21   sentence says:

22            If, as plaintiffs allege, the

23   FPI and DOB inspector jobs are similar and

24   the DOB positions are paid more, we should

25   observe those in the FPI position
```

115

```
 1                    C. ERATH

 2    attempting to switch jobs and become DOB

 3    inspectors.

 4              So your focus here, as I

 5    understand it, is on people who are FPIs at

 6    the time and are seeking -- or and whether

 7    or not they attempt to switch jobs to

 8    become DOB inspectors, is that right?

 9         A.    Yes.

10         Q.    And your theory is that if the

11    jobs are similar but the DOB inspectors are

12    paid more, then as a matter of commission

13    rationality, FPI should apply to become DOB

14    inspectors, is that right?

15         A.    Absent other differentiating

16    factors between the two jobs.

17         Q.    If the FPIs don't apply or

18    apply infrequently for the DOB positions,

19    what you would infer is that either the

20    jobs are not similar in one or more ways,

21    or that the DOB inspectors are not paid

22    more in compensation, is that correct?

23         A.    When the entire compensation

24    package is considered.

25         Q.    At any point, did you reach a
```

116

```
 1                    C. ERATH

 2   conclusion whether what you believe is

 3   relative lack of movement from the FPIs to

 4   the DOB inspector positions is because of

 5   lack of similarity of jobs or no real

 6   difference in total compensation or both?

 7        A.    In your question, you said

 8   relative lack of movement.  Relative to

 9   what?

10        Q.    Well, you don't say that there

11   is no effort to move.  You identified 12

12   people who applied, so I don't want to say

13   no attempt to move.  But given the numbers,

14   is your conclusion that those numbers and

15   only those numbers of FPIs applied because

16   the jobs are dissimilar because there's no

17   real difference in total compensation or

18   both?

19        A.    I don't reach a conclusion one

20   way or the other.  Both of those are

21   possible hypotheses.

22        Q.    There could be other

23   explanations as well, couldn't there?

24        A.    Conceivably.

25        Q.    You don't cite in your report
```

117

```
 1                    C. ERATH
 2   any treatise or other authority for the
 3   proposition that job A either must not be
 4   similar to job B or job B must not be
 5   compensated better than job A.  The persons
 6   in job A don't apply for positions in job
 7   B.
 8             Is there some type of authority
 9   that you would support for that
10   proposition?
11        A.    For the proposition that people
12   would want the higher paying of two similar
13   jobs?
14        Q.    Yes.
15        A.    Sure.  I mean, I think the
16   Ehrenberg and Smith book we talked about
17   this morning has a sentence saying all
18   other things equal, if two jobs pay the
19   same, people will flock to the higher pay.
20        Q.    Have you advanced the same
21   theory in any other cases in which you have
22   testified?
23        A.    The theory that people would
24   want the higher paying of two identical
25   jobs?
```

118

```
 1                    C. ERATH

 2        Q.    Yes.

 3        A.    It's such a basic concept, I

 4   think you wouldn't even advance it.  You

 5   would just assume it.

 6        Q.    Okay.

 7        A.    Given a choice between more

 8   money and less money, and everything else

 9   is the same, I'll take the money.

10        Q.    The EEOC and other federal

11   agencies issued almost 50 years ago the

12   Uniform Guidelines of Employees Selection

13   Procedures, correct?

14        A.    I don't know the timing.

15        Q.    You are familiar though with

16   the Uniform Guidelines?

17        A.    Yes.

18        Q.    Doesn't it state that the

19   primary means of determining whether two

20   jobs are similar is job content?

21             MS. CROUSHORE:  Objection.

22        A.    I -- I haven't read them

23   recently enough to agree or disagree.

24        Q.    Do you recall in the Uniform

25   Guidelines any discussion of determining
```

119

1   C. ERATH

2   whether jobs are similar by whether there

3   is a movement between the jobs or at least

4   applications to move between the jobs?

5   A.   Again, I haven't read them

6   recently enough to remember one way or the

7   other.

8   Q.   Now, one possible explanation

9   for lack of movement from one job to

10   another job that pays more, even if they're

11   similar, is whether there are barriers to

12   movement that have been erected, isn't that

13   correct?

14   A.   Theoretically, sure.

15   Q.   And what did you do in this

16   case to determine whether there were any

17   barriers to movement from one job to the

18   next?

19   A.   I don't recall any specific

20   discussion on that topic.

21   Q.   I wasn't limiting it to

22   discussion. Just did you do anything to

23   try to determine if there were any barriers

24   to movement from the FPI position to the

25   Department of Building inspector positions?

120

```
 1                    C. ERATH

 2          MS. CROUSHORE:  Objection.

 3      A.    I certainly looked at the NOEs

 4   for both jobs, which didn't rule anybody

 5   out or suggest that there was any barrier

 6   other than the experience and education

 7   requirements we've already discussed.  So

 8   it appears the application for building

 9   inspector is open to anyone who meets the

10   minimum requirements enumerated there.

11      Q.    In addition to the NOEs, did

12   you look at any other types of documents to

13   determine whether the jobs were similar?

14      A.    Well, we have the analysis of

15   the lack of movement we've been discussing.

16   That's certainly on point there.  I -- I

17   read the Scherbaum and Goldstein reports

18   that discuss it.

19            Beyond that, no.  Let me amend

20   that.  I should say I also spent a little

21   bit of time looking at the O*NET database

22   that they signed.

23      Q.    Have you ever looked at the

24   O*NET database before?

25      A.    Yes, but seldom.
```

121

1   C. ERATH

2   Q.   Is it fair to say that

3   Drs. Goldstein and Scherbaum tried to

4   analyze the similarity of the job duties

5   and of the KSAs by examining analyses and

6   descriptions of those while you tried to

7   infer whether jobs were similar for your

8   mobility study and the minimum requirements

9   in the NOEs?

10   MS. CROUSHORE: Objection.

11   A.   I think to answer that requires

12   me to be in the head of Scherbaum and

13   Goldstein, so I don't again want to speak

14   for them.

15   Q.   Is it fair to say that based on

16   their report, Drs. Goldstein and Scherbaum

17   analyzed the similarity of the job duties

18   and the KSAs by examining job analyses and

19   descriptions of the duties directly while

20   you tried to infer whether the jobs were

21   similar to the mobility studies and develop

22   minimum requirements and in the NOEs?

23   MS. CROUSHORE: Objection.

24   A.   So the part of that question

25   that pertained to me, I analyzed what would

122

                         C. ERATH

1

2 have to be the direct implication of the

3 claim that they are making in the report

4 and found evidence to the contrary.

5   In terms of the part of the

6 question that applied to them, it appeared

7 to me that the O*NET-based analysis is not

8 actually looking at the functions performed

9 but rather broad categories of tasks rather

10 than the specifics of what fire inspectors

11 or building inspectors do.

12   Q.   Let's focus on you. You are

13 trying to infer whether the jobs are

14 similar primarily through your mobility

15 analysis and the minimum requirements set

16 forth in the NOEs, is that right?

17   A.   I'm not trying to infer whether

18 they're similar. I'm looking at a direct

19 implication of the claim that they are

20 similar and noting evidence to the

21 contrary.

22   Q.   Dr. Erath, do you have copies

23 of the notices of examination that were

24 previously marked Exhibits 9, 10, 11 and

25 12?

123

1   C. ERATH

2   A.   Electronically, yes.

3   Q.   If you look at Page 11, your

4   list of reliance materials, you will see

5   under item seven, item or inspector

6   construction NOEs for exams 1011, 5008,

7   0115 and 1164. Do you see that?

8   A.   Yes.

9   Q.   Are the documents that have

10 been marked as Exhibits 9, 10, 11, and 12

11 those four exams?

12   A.   I can go through them one by

13 one. I will take your word for it if

14 they're the same ones, same examiners. 12,

15 6049.

16   Q.   Twelve is not right, I'm sorry.

17 So Exhibit 9 is 5,008, which is one of

18 those that you list, is that correct?

19   A.   Which one, Exhibit 8 you said?

20   Q.   Exhibit 9 is 5,008, which is

21 one of those that you list in Item 7?

22   A.   That looks to be the case, yes.

23   Q.   And Exhibit 10 is exam number

24 0115, which is also listed in Item 7, is

25 that correct?

124

```
 1                    C. ERATH

 2        A.    Exhibit 10 is 115, yes.

 3        Q.    And Exhibit 11 was 1164, which

 4   is also one of those listed in Item 7?

 5        A.    Exhibit 11 is 1164.

 6        Q.    But somehow I have messed up

 7   and 6049 is not listed.  The one that I am

 8   missing is 1011, 1011?

 9        A.    Looks that way.

10        Q.    Do you know what year 1011 was

11   issued?

12        A.    No.

13        Q.    You make a reference on Page 4

14   of your report to a construction inspector

15   notice for 2010.  Could 1,011 have been

16   issued in 2010, do you know?

17        A.    I'm sure it could have been.

18        Q.    And you believe that you have

19   accurately described the minimum

20   requirements that are set out in the

21   various NOEs for the construction inspector

22   position?

23        A.    I mean, I only -- I list the

24   requirements that were in place before the

25   change, so I actually enumerate one, two,
```

125

1   C. ERATH

2   three, four, five for the earlier time

3   period -- sorry, one, two, three, four.

4   You asked about construction inspectors.

5   That specifically is talking about 2010 and

6   2014.

7   Q.   And then in 2019 you show

8   certain changes to that?

9   A.   That's right.

10   Q.   And as far as you know, the

11   changes in 2019 are a complete set of the

12   changes that were made?

13   A.   Made in 2019?

14   Q.   Yes.

15   A.   I believe so. I mean, I think

16   I may have taken -- I didn't reproduce the

17   text, obviously, so I wasn't attempting to

18   say it verbatim so it may be my shorthand

19   for what the change was, but yes, with that

20   caveat.

21   Q.   And if you go back to the

22   bottom of Page 3 through the top of Page 4,

23   you list five requirements in order to take

24   the FPI exam for the period of 2009 to '15,

25   is that correct?

126

```
 1                    C. ERATH
 2        A.    That's right.
 3        Q.    Is that taken verbatim?
 4        A.    That was my intention.
 5        Q.    And it was the same each year
 6   during that period?
 7        A.    I believe so.
 8        Q.    And then in 2017, you
 9   describe -- this is on Page 4, the middle
10   paragraph.  You describe a change that was
11   made to the FPI exam NOE, is that right?
12        A.    Right, that's a change to the
13   education requirement.
14        Q.    And you have accurately
15   described what that change is?
16        A.    That's probably my paraphrase
17   again, but that was the intent.
18        Q.    And as far as you know, the
19   requirements have not changed for the FPI
20   exam since 2017, is that right?
21        A.    That's right.
22        Q.    And I should have asked you,
23   with respect to the construction inspector
24   exam, as far as you know, the requirements
25   have not changed since 2019?
```

127

```
 1                    C. ERATH
 2        A.    I -- the 2021 is different.
 3        Q.    In what way is the 2021
 4   different?
 5        A.    I do not believe there is a
 6   multiple-choice test anymore.
 7        Q.    Other than that, the 2021 you
 8   believe is the same as the 2019?
 9        A.    I believe so.
10             MS. CROUSHORE:  Objection.
11        Q.    If you turn to Page 5, you
12   conclude in the first full sentence that
13   knowledge, experience and education
14   requirements clearly differ between the
15   positions.  Do you see that?
16        A.    I do.
17        Q.    And concerning the difference,
18   are you talking primarily in terms of the
19   focus of the experience and education
20   that's required?
21        A.    Focus in amount that it was the
22   time period of the study, so five years
23   versus three years there.  But you're
24   right, there are differences in the areas
25   of experience that are sought after as
```

128

1   C. ERATH

2   well.

3   Q.   But as we discussed, at least

4   in the last two years, it's now three years

5   for FPI, two years for construction

6   inspectors?

7   A.   Yes, in that first requirement.

8   And we talked about my caveat there, and

9   your point still holds that there's a

10   different type of experience, obviously.

11   Q.   You say in the last sentence of

12   the paragraph, we were just looking at the

13   first full paragraph of five, that lack of

14   movement directly contradicts plaintiffs'

15   maintained hypothesis that the jobs are

16   similar. Do you see that?

17   A.   Yes.

18   Q.   You had said I thought earlier

19   that you haven't reached an opinion about

20   whether the reason for the lack of movement

21   was, that the jobs were similar or whether

22   there was no difference in compensation.

23   So here are you saying that it's because

24   the jobs are dissimilar?

25   MS. CROUSHORE: Objection.

129

1   C. ERATH

2   A.   I'm saying that the direct

3   implication of the plaintiffs' assumption

4   should be that we see movement between the

5   two jobs and we do not, so that is a direct

6   contradiction.

7   Q.   So have you actually concluded

8   based on the lack of movement that the jobs

9   are not similar?

10   A.   That's one possible reason for

11 the lack of movement.

12   Q.   But again, there are other

13 possible reasons?

14   A.   That's right.

15   Q.   So the jobs might be similar,

16 and there might be other reasons for lack

17 of movement?

18   A.   It's theoretically possible.

19 Plaintiffs have not advanced such.

20   Q.   Is your opinion that the lack

21 of movement directly contradicts

22 plaintiffs' maintained hypothesis that the

23 jobs are similar given your role as a labor

24 economist?

25   A.   Yes.

130

```
 1                    C. ERATH

 2        Q.    Let's go back to Page 3 of your

 3   report.  In the roughly middle paragraph,

 4   the one that begins the nearly complete

 5   absence, have you found that paragraph?

 6        A.    Yes.

 7        Q.    You will see in the third line

 8   that you see that FPIs applied for roughly

 9   250 different jobs with said jobs ranging

10   from forester to crime specialist to bus

11   operator.

12             Does the 250 mean that they

13   applied for 250 different job titles?

14        A.    That I had seen, 250 different

15   exam titles in the data.

16        Q.    So you weren't saying that 250

17   FPIs submitted applications for a job, is

18   that right?

19        A.    That's right, it's just a

20   number of different exams I observed in

21   that database.

22        Q.    And then you say that one

23   individual applied for 47 exams.  Do you

24   see that?

25        A.    Yes.
```

131

```
 1                    C. ERATH

 2       Q.    If you could call or look at

 3   what I have marked as Exhibit 4?

 4       A.    I have it.

 5       Q.    I will represent to you that

 6   this was extracted from the spreadsheet

 7   that you provided to us.  And if you

 8   counted up, this person Katawba DeLarosa

 9   applied for 47 different exams.

10            Is this the person to whom you

11   were referring?

12       A.    Seems likely.  I think there

13   was only one with 47.  Thank you for not

14   making me count these.

15       Q.    Now, I want to make sure that I

16   correctly understand this.

17            Each line here represents an

18   application, is that correct?

19       A.    For an exam, yes.

20       Q.    And there is a column that is

21   headed "exam type."  You will see that all

22   but one of these is a C and the one

23   exception is a P.  Do you see that?

24       A.    Yes.

25       Q.    And is it your understanding
```

132

```
 1                    C. ERATH

 2   that P stands for promotional exam?

 3        A.    That would be my assumption.

 4        Q.    You haven't checked to confirm

 5   that?

 6        A.    That's my belief.  I didn't say

 7   I confirmed it one way or the other.

 8        Q.    The last column is headed

 9   "application day."  Is it your

10   understanding that that's when the

11   individual actually applied to take the

12   exam?

13        A.    I did not specifically ask what

14   that is but that seemed like a reasonable

15   interpretation of the application date.

16        Q.    You will see that his first

17   exam that he applied for was dated January

18   19, 1999.  Do you see that?

19        A.    Yes.

20        Q.    That's obviously before 2005.

21   So were you looking at applications that

22   were submitted before fiscal year 2005 when

23   you were doing your analysis?

24        A.    So when I counted the number of

25   applications for this individual, I was
```

133

1   C. ERATH

2   looking at all of them.

3   Q.   When you were counting the

4   number of different job titles applied for,

5   were you counting all of them or just the

6   ones from 2005 forward?

7   A.   I don't recall.

8   Q.   We are going to come back to

9   this, but I want to go to what's been

10   marked as Exhibit 5. And I will represent

11   to you that these were the entries for the

12   first looks like five, if I count right,

13   five persons in your spreadsheet.

14   You will see that the first

15   individual, Lionel Hudson, all of his

16   applications were made before 2005. Do you

17   see that?

18   A.   Yes.

19   Q.   Do you know, would any

20   applications that he made have been

21   considered in your statement about the

22   type, the number of different types of

23   tests that were taken?

24   A.   So if you're asking

25   specifically when I said there were 250

134

1   C. ERATH

2   different exams that somebody applied for?

3   Is that what you're asking about?

4   Q.   Yes.

5   A.   So as I said, I don't recall

6   whether I put a date limitation on that.

7   It would only matter to the count of 250

8   if, for instance, Mr. Hudson were the only

9   bus operator 'cause I'm not -- I'm not

10   counting individual bus operator

11   applications but rather just looking at

12   okay, bus operator was one that was on the

13   list.

14   So I don't know whether that

15   250 would become 249 in that instance, so I

16   was merely attempting to illustrate that

17   there are a lot of different jobs for which

18   these folks apply.

19   Q.   You also had a count that we

20   looked at earlier that there were 669 fire

21   protection inspectors in the analysis that

22   you performed.

23   Do you know whether Mr. Hudson

24   would or would not be in that count of 669?

25   A.   I assume he would, but I don't

135

```
 1                    C. ERATH

 2    know for sure.

 3         Q.    So you think you may not have

 4    excluded people like him who had applied

 5    before 2005?

 6         A.    Well, the analysis that's being

 7    done here, remember, is whether we see

 8    people moving from FPI to an inspector job

 9    in the -- in the Department of Buildings.

10    So, you know, to be on this list, he would

11    have had to be an FPI of 2005 or later, and

12    therefore, you know, it's a valid

13    observation for someone who did not put his

14    hat in the Department of Buildings' ring

15    during the relevant period.

16         Q.    Let's go back to Exhibit 4,

17    Mr. DeLarosa.  If you go through this list,

18    you will see that about two-thirds of the

19    way down is when he applies to become a

20    fire protection inspector.  Do you see

21    that?

22         A.    Yes.

23         Q.    And you will see the

24    application date is from 2017?

25         A.    Yes, I see that.
```

136

1   C. ERATH

2   Q.   So he couldn't become an FPI

3   before he took that exam, correct?

4   A.   I believe that's true.

5   Q.   The exams that he applied for

6   before March 19, 2017, do they indicate

7   anything about the types of jobs for which

8   FPIs were applying?

9   A.   Again, the -- what I'm using

10   this for is merely to illustrate that these

11   individuals who were FPIs also considered a

12   wide variety of jobs.

13   So Mr. DeLarosa, who did become

14   an FPI, as we can see here, Exhibit 4,

15   considered a wide variety of positions.

16   Q.   But many of them, the majority

17   were considered before he became an FPI,

18   right?

19   A.   Yes.

20   Q.   Now, do you know, did he have

21   the minimum qualifications to become a fire

22   protection inspector in 2009 let's say when

23   he was applying for other jobs?

24   A.   I don't know.

25   Q.   Or the minimum qualifications

137

```
 1                    C. ERATH
 2   to become a building inspector in 2017?
 3        A.    I don't know anything about his
 4   qualifications.
 5        Q.    So you are not really analyzing
 6   whether FPIs were applying to become
 7   building inspectors, you are analyzing
 8   whether people who at some time became an
 9   FPI were applying for other types of jobs
10   or building inspector jobs, is that right?
11        A.    No, I don't think that's right.
12        Q.    And what is wrong about that?
13        A.    You -- the beginning of your
14   question was -- said that I wasn't
15   considering whether FPIs became building
16   inspectors.  That was the primary focus of
17   the analysis.  So that is the basis of my
18   disagreement.
19        Q.    But in 2009, for instance, he
20   was not an FPI, correct?
21        A.    That's correct.
22        Q.    And you don't know what his
23   qualifications were in 2009?
24        A.    That is correct.
25        Q.    So if he were applying to other
```

138

```
 1                    C. ERATH
 2   types of positions, then it doesn't reflect
 3   whether FPIs were applying for other types
 4   of positions, it reflects whether people
 5   who at some time became FPIs were applying?
 6        A.    I mean, as I say in the report,
 7   I'm looking at people who were FPIs and
 8   whether they moved to building inspector.
 9   And the answer is, no one has.
10   Mr. DeLarosa is one such example.
11        Q.    Even after Mr. DeLarosa applied
12   to become an FPI, he wouldn't become an FPI
13   immediately, correct?
14        A.    Yes, that's correct.
15        Q.    He would have to take the test,
16   have the test graded, and then there would
17   have to be openings that reached him before
18   he would be called, is that right?
19        A.    He would clearly be hired at
20   some subsequent time to the exam.
21        Q.    Would you look at what was
22   marked as Exhibit 7.
23        A.    I have it.
24        Q.    Have you ever heard of the
25   database SeeThroughNY?
```

139

```
 1                    C. ERATH

 2       A.    Not under that name, no.

 3       Q.    I will represent that this is a

 4   publicly available database.  You will see

 5   it is addressed www.SeeThroughNY.net.  That

 6   shows for certain information about the

 7   position and pay of all New York State

 8   employees.  And you will see that until

 9   fiscal year 2020, he does not show as a

10   fire protection inspector.

11             MS. CROUSHORE:  I will just

12         note an objection to the use of this

13         document, which is not any sort of

14         official city document or anything.

15       A.    I see an entry for FPI pay year

16   2020, if that's what you're asking.

17       Q.    Do you know whether

18   Mr. DeLarosa wasn't hired until year 2020

19   as a fire protection inspector?

20       A.    I have not committed his

21   employment history to memory.

22       Q.    Let's assume that that is

23   correct, that he became a fire protection

24   inspector at some time in fiscal year 2020.

25   If we go back to Exhibit 4, doesn't it
```

140

1   C. ERATH

2   reflect that he applied for only three

3   tests after he became a fire protection

4   inspector?

5   MS. CROUSHORE: Objection.

6   A.   Sorry. Are you asking me to

7   assume he became fire protection inspector

8   when?

9   Q.   In fiscal year 2020.

10   A.   Yes. And there are -- there

11   are three entries in 2020 or later, if

12   that's what you're asking.

13   Q.   And one of those is for a

14   promotional exam to associate fire

15   protection inspector?

16   A.   That's correct.

17   Q.   So Mr. DeLarosa applied for

18   only two other positions, if you exclude

19   the fire protection inspector chain, after

20   he became and while he was a fire

21   protection inspector, is that right?

22   A.   As of the date of this

23   document, yes.

24   MS. CROUSHORE: I am sorry this

25   is late, but I would like to object

141

```
 1                    C. ERATH

 2       to that last question, please.

 3       A.    Is now a good time for a break?

 4       Q.    Sure.

 5             (Whereupon, a short recess was

 6        taken.)

 7       Q.    Dr. Erath, you identify in the

 8  same sentence that we looked at where you

 9  referred to the 250 different jobs, three

10  specific ones.  I believe they were bus

11  operator, forester and crime specialist?

12       A.    Yes.

13       Q.    Do you see that?

14       A.    Yes, I do.

15       Q.    I looked at the spreadsheet and

16  found that only one application for

17  forester in the data.  And if you pull up

18  Exhibit 8, you will see where that occurs,

19  a Mr. Charles Lyons.

20             MR. LIEDER:  And Judy, Lyons is

21        spelled, L-Y-O-N-S.

22       A.    I see Mr. Lyons applying for

23  forester in 2013.

24       Q.    Yes.  And he doesn't apply for

25  a fire protection inspector position until
```

142

1   C. ERATH

2   2017, is that correct?

3   A.   So this says.

4   Q.   And if the spreadsheet is

5   correct, the only applications for a

6   forester position was before the candidate

7   became fire protection inspector?

8   A.   If your representation is

9   accurate, that this is the only forester

10   application, 2013 is before 2017.

11   Q.   So again, Mr. Lyons did not

12   apply for a forester position in an effort

13   to move from fire protection inspector to

14   another type of job, is that correct?

15   A.   The forester application is

16   before he became a fire protection

17   inspector.

18   Q.   I also looked for the job of

19   prime specialist, which you include, and I

20   didn't find any prime specialist in the

21   spreadsheet. If you want to search, you

22   could. I did find two instances of someone

23   applying for the job of crime analyst. Is

24   that what you meant?

25   A.   I would hope I wrote the job

143

1   C. ERATH

2   down correctly, but I don't remember one

3   way or the other.

4   Q.   If you go back to the paragraph

5   that refers to 250 different jobs, you will

6   see that the last sentence says nearly 80

7   percent of FPIs applied for an exam other

8   than FPI or associate FPI.

9   Do you know how many of those

10   applications were submitted exclusively

11   either before 2004 or before the applicant

12   actually became an FPI or associate FPI?

13   A.   No.

14   MS. CROUSHORE: Objection.

15   A.   All I'm trying to do here is

16   demonstrate that this group of individuals

17   has a wide range of potential interests.

18   Q.   Would it surprise you that the

19   majority of the applications in the

20   spreadsheet are from either before 2004 or

21   before the candidate became an FPI?

22   A.   I don't have any basis to be

23   surprised or unsurprised.

24   Q.   And that if you eliminate

25   applications for an associate FPI position

144

1   C. ERATH

2   from those who were already FPIs, that that

3   eliminates another roughly two-thirds of

4   the applications?

5   MS. CROUSHORE: Objection.

6   A.   I have not studied that

7   question.

8   Q.   Dr. Erath, we looked earlier at

9   the NOEs for the construction inspector

10 position. Do you remember that?

11   A.   I do.

12   Q.   And the NOEs that I marked as

13 exhibits were from 2021, 2019 and 2014 and

14 then also one from 2006. Do you remember

15 that?

16   A.   That sounds right.

17   Q.   And you refer to an NOE in your

18 report from 2010, is that right?

19   A.   Yes.

20   Q.   Well, let me back up and ask a

21 different question first.

22   Are you aware of any other NOEs

23 for construction inspector positions

24 bearing the 2005 to a period forward?

25   A.   Am I aware of any? No. But I

145

```
 1                    C. ERATH
 2   haven't attempted to commit an exhaustive
 3   list to memory.
 4        Q.    Do you know whether the
 5   spreadsheet that you were relying on shows
 6   applications from FPIs only in those years,
 7   2006, '10, '14, '19 and '21?
 8             MS. CROUSHORE:  Objection.
 9        A.    Are you asking do I see
10   applications from FPIs for building
11   construct or exams other than those?
12        Q.    Yes.
13        A.    I don't know that I
14   cross-referenced those two sources.
15        Q.    Let's assume for now that there
16   were just those five during the period from
17   2005 to '21, 2006, '10, '14, '19, '21.   So
18   I know between '19 and '21 it is shorter
19   and between 2014 and 2019 is a little
20   longer but essentially every four years,
21   right?
22        A.    It's not really every four
23   years, but it is what it is.
24        Q.    How long do individuals have
25   under the NOEs to apply for an exam?  Or
```

146

1   C. ERATH

2   let me narrow it, apply for a construction

3   inspector exam?

4   A.   How long from what? How long

5   is the exam period?

6   Q.   How long is the application

7   period?

8   A.   I don't recall.

9   Q.   I think if you look at the

10   exams, it is three weeks.

11   A.   Would you like me to do that?

12   Q.   Sure.

13   A.   I opened the 2019 one up. You

14   are correct there. Do you want me to keep

15   going or --

16   Q.   No, that's fine. So if there

17   were five exams and each time there was a

18   three-week application period, the five

19   protection inspectors could apply only for

20   15 weeks out of the 16-week period or

21   16-year period, is that correct?

22   A.   If those are the only exams and

23   they're all three weeks, five times three

24   is certainly 15 to take the exam.

25   Q.   Do you have any idea how many

147

```
 1                    C. ERATH

 2  exams were offered for other types of jobs

 3  during the 2005 to '20 period?

 4        A.    Any other type of job?

 5        Q.    Yes.

 6        A.    No.

 7        Q.    The opportunity to apply for

 8  other types of jobs was much greater than

 9  the opportunity of FPIs to apply for

10  building inspector jobs, is that correct?

11              MS. CROUSHORE:  Objection.

12        A.    I don't have a list of other

13  jobs in front of me, but I would not be

14  surprised were that the case.

15        Q.    Did you look at all at the

16  types of jobs for which FPIs applied most

17  frequently?

18        A.    I don't believe I did.

19        Q.    I will represent to you that

20  for applications for people who were at the

21  time of the application FPIs, the most

22  frequent was for firefighter.

23              Do you know, was the average

24  compensation of firefighters more than the

25  average compensation of FPIs?
```

148

1   C. ERATH

2   A.   I believe so.

3   Q.   Is it more than the average

4   compensation of construction inspectors?

5   A.   That I don't know.

6   Q.   Did you look at the minimum

7   qualifications to take the test for

8   firefighters?

9   A.   No.

10   Q.   If the average compensation of

11   firefighters was greater than the average

12   compensation of construction inspectors and

13   if the individuals, the fire protection

14   inspectors could meet the minimum

15   qualifications, would it make sense for

16   them to apply for firefighters' positions

17   than for the construction manager

18   positions?

19   MS. CROUSHORE: Objection.

20   A.   You mean construction

21   inspector?

22   Q.   Yes, I'm sorry, construction

23   inspector, sorry.

24   A.   Would it make more sense?   I

25   mean, your question presupposes that they

149

```
 1                    C. ERATH
 2   can only apply for one.  It depends on the
 3   likelihood of getting them.  That's
 4   impossible to answer from the information
 5   provided.
 6        Q.    So one of the factors that
 7   presumably an economically rational actor
 8   or fire protection inspector should
 9   consider is the likelihood of getting the
10   job?
11        A.    In what content?
12        Q.    Well, I thought that that was
13   in your answer, that you said that you
14   didn't know what the likelihood of getting
15   the job would be.
16        A.    I was attempting to.  I didn't
17   know you were following along with your
18   previous question.  Perhaps we should start
19   over.
20        Q.    Okay.
21             From the point of view of an
22   economically rational actor, if a fire
23   protection inspector could meet the minimum
24   requirements for a construction inspector
25   position and a firefighter position, and if
```

150

1   C. ERATH

2   the firefighter position paid more on

3   average than the construction inspector

4   position, would it make more sense for them

5   to apply for the firefighter position than

6   the construction inspector position?

7   MS. CROUSHORE: Objection.

8   A.   Make more sense? I mean, I

9   assume they could apply for both and have

10   two avenues open to them, but very hard to

11   answer that question from what you said.

12   Q.   Do you know whether other jobs

13   in the top five jobs for which fire

14   protection inspectors applied offered more

15   pay than did the construction inspector

16   position?

17   MS. CROUSHORE: Objection.

18   A.   As I mentioned, I did not study

19   what those jobs are.

20   Q.   Or what the pay of those jobs

21   are either, is that right?

22   A.   Since I don't know what the

23   jobs are, I don't know what they pay.

24   Q.   In the file that you received

25   of the HR actions involving both the fire

151

```
 1                    C. ERATH

 2   protection inspectors and the building

 3   inspectors, do you recall a field called

 4   civil service code description?

 5        A.    Not with specificity, but

 6   wouldn't surprise me were it there.

 7        Q.    And do you recall seeing a

 8   field, even if you don't remember the name

 9   of it, that contained information

10   identifying the process by which fire

11   protection inspectors and building

12   inspectors were selected?

13        A.    What do you mean by process?

14        Q.    Well, whether it was through a

15   competitive process or a provisional

16   appointment or a noncompetitive process?

17        A.    That sounds familiar.

18        Q.    Did you look at that particular

19   field to evaluate which process was used

20   primarily in the selection of fire

21   protection inspectors and building or

22   construction inspectors?

23        A.    No.

24        Q.    So do you have any idea whether

25   fire protection inspectors were selected
```

152

```
 1                    C. ERATH

 2   primarily through a different mechanism

 3   than construction inspectors and building

 4   inspectors?

 5        A.    I don't know.

 6        Q.    You don't know that under 30

 7   percent of construction inspectors were

 8   selected through provisional appointments

 9   rather than the competitive process?

10        A.    I don't know the figure.

11        Q.    Even if you didn't know the

12   figure, did you know that a large

13   percentage of construction inspectors were

14   selected provisionally rather than through

15   the competitive process?

16        A.    I did not attempt to calibrate

17   that number.

18        Q.    Could you turn to Page 7 of

19   your report?

20        A.    I have it.

21        Q.    And you will see that you are

22   quoting extensively from the testimony of

23   plaintiff Darren Connors?

24        A.    Yes.

25        Q.    And you will see that his
```

153

```
 1                    C. ERATH

 2   second answer references that he did apply

 3   for a position as a buildings inspector

 4   provisional -- I assume it meant

 5   provisionally -- and he received a job

 6   offer from the Department of Buildings?  Do

 7   you see that?

 8        A.    Yes.

 9        Q.    And if you go down about

10   two-thirds of the way through the colloquy,

11   you will get to an answer:  Yes, after

12   seeing the inner office and speaking to the

13   person who was in charge of hiring a

14   provisional, it was not worth it for me.

15             Do you see that?

16        A.    Yes.

17        Q.    Did you infer from this

18   dialogue or that testimony that you

19   prescribed that he at least was offered a

20   position provisionally?

21        A.    He says he received a job offer

22   from the Department of Buildings.

23        Q.    And did that prompt you at all

24   to look at how the Department of Buildings

25   was filling positions?
```

154

1   C. ERATH

2   A.   Not sure what you mean.

3   Q.   Did that cause you to look at

4   the field we were talking about that

5   identifies whether employees are being

6   hired through a competitive process or

7   provisionally?

8   MS. CROUSHORE: Objection.

9   A.   I knew there were provisional

10   hires to building inspectors. I knew there

11   were competitive hires and that those who

12   were hired provisionally would eventually

13   have to take the exam to keep their job.

14   So either way, the exam would be a

15   requirement.

16   Q.   Do you know whether FPIs

17   generally knew that the Department of

18   Buildings hired most of its inspectors

19   provisionally outside the competitive

20   process?

21   A.   I don't know that the latter

22   part of your statement's true, and I also

23   don't know what is in the mind of FPIs.

24   Q.   Let's assume that for purposes

25   of this question hypothetically that fire

155

1   C. ERATH

2   protection inspectors generally knew that

3   the Department of Buildings hired most of

4   its inspectors provisionally rather than

5   through the examination process.

6   Do you have an opinion as a

7   labor economist as to whether it would

8   affect their interest in applying to take

9   the construction inspector test?

10   A.   Well, that depends on what

11 other information. We are assuming that,

12 you know, if they knew, that they could

13 take the job provisionally and then would

14 have to pass the test, that puts them in

15 largely the same position of needing to

16 pass that test in order to be -- to remain

17 a building inspector.

18   So you know, either way, yeah,

19 you're gonna need to face that exam at some

20 point. So if you want to make the move,

21 you should take it.

22   Q.   You quote from the testimony of

23 Darren Connors and of Darryl Chalmers. Did

24 you read the deposition testimony of the

25 other three plaintiffs?

156

1   C. ERATH

2   A.   The other three named

3   plaintiffs?

4   Q.   Yes.

5   A.   Yes, I did.

6   Q.   You are aware then that the

7   fire protection inspectors frequently work

8   on joint task forces with the Department of

9   Buildings inspectors?

10   A.   I don't know about frequently.

11 I know I -- I do recall a reference to

12 joint task forces.

13   Q.   Wouldn't that provide an avenue

14 for fire protection inspectors to learn

15 about the processes by which the Department

16 of Buildings hired its inspectors?

17   MS. CROUSHORE: Objection.

18   A.   Because they could talk to

19 construction inspectors? Is that your --

20   Q.   Yes.

21   A.   -- hypothesis?

22   Q.   Yes, while they're working.

23   A.   I don't know one way or the

24 other if being on a joint task force meant

25 you were standing next to the person or

157

```
 1                      C. ERATH

 2   were three floors away or, I mean, what

 3   opportunity you had for communication.

 4   I -- I don't know.

 5              MR. LIEDER:  I have no other

 6         questions.

 7              MS. CROUSHORE:  I just have a

 8         couple of really quick ones

 9         hopefully.  Famous last words, I

10         know.

11   EXAMINATION BY

12   MS. CROUSHORE:

13       Q.   Dr. Erath, you were talking

14   earlier about your note in your report that

15   FPIs applied for roughly 250 different

16   jobs, right?

17       A.   Yes.

18       Q.   If 50 people applied for the

19   associate FPI position, would that count as

20   50 in that 250 or as one?

21       A.   That's one.  Those are

22   different jobs.

23       Q.   And then when we were just

24   talking about Department of Buildings

25   hiring provisionally, when you were looking
```

158

1   C. ERATH

2   at whether FPIs moved to Department of

3   Buildings, I know you looked at the exams

4   that they took.

5   Did you also look at the larger

6   data set of sort of HR information about

7   all of the FPIs and building inspectors to

8   see whether anybody actually did move from

9   FPI to Buildings?

10   MR. LIEDER: Objection.

11   A.   I did. I'm sorry. I did look

12   at those data and -- and no one made that

13   move.

14   Q.   Had somebody applied for the

15   job provisionally and gotten the job

16   provisionally and taken the job through

17   that process, would they have appeared in

18   that data as having moved?

19   A.   That is my assumption.

20   MS. CROUSHORE: Okay. Thank

21   you. That's all my questions.

22   MR. LIEDER: I have no other

23   questions. Thank you very much,

24   Dr. Erath.

25   MS. CROUSHORE: Yes, thank you.

159

1   C. ERATH

2   THE WITNESS: Thank you.

3   (Whereupon, at 4:10 P.M., the

4   Examination of this witness was

5   concluded.)

6

7   °   °   °   °

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

160

 1

 2   D E C L A R A T I O N

 3

 4   I hereby certify that having been

 5   first duly sworn to testify to the truth, I

 6   gave the above testimony.

 7

 8   I FURTHER CERTIFY that the foregoing

 9   transcript is a true and correct transcript

10   of the testimony given by me at the time

11   and place specified hereinbefore.

12

13

14

                    _____
15
                        CHRISTOPHER ERATH
16

17

18
      Subscribed and sworn to before me
19
      this _____ day of _____ 2021.
20

21

22   _____

23   NOTARY PUBLIC

24

25

```
                                                        161
 1

 2                  E X H I B I T S

 3

 4   PLAINTIFF EXHIBITS

 5

 6   EXHIBIT    EXHIBIT

 7              DESCRIPTION                    PAGE

 8    1 - 5    Documents                        4

 9    7 - 13   Documents                        4

10    (Exhibits retained by Counsel.)

11

12                  I N D E X

13   EXAMINATION BY                           PAGE

14   Mr. Lieder                                6

15   Ms. Croushore                            157

16

17   INFORMATION AND/OR DOCUMENTS REQUESTED

18   INFORMATION AND/OR DOCUMENTS            PAGE

19

20    (None)

21

22             QUESTIONS MARKED FOR RULINGS

23   QUESTION                            PAGE LINE

24    (None)

25
```

162

```
 1

 2              C E R T I F I C A T E

 3

 4    STATE OF NEW YORK     )
                            :    SS.:
 5    COUNTY OF ROCKLAND    )

 6

 7         I, JUDY ROSENBERG, a Notary Public

 8    for and within the State of New York, do

 9    hereby certify:

10         That the witness whose examination is

11    hereinbefore set forth was duly sworn and

12    that such examination is a true record of

13    the testimony given by that witness.

14         I further certify that I am not

15    related to any of the parties to this

16    action by blood or by marriage and that I

17    am in no way interested in the outcome of

18    this matter.

19         IN WITNESS WHEREOF, I have hereunto

20    set my hand this 10th day of August, 2021.

21

22

23    _____

24              JUDY ROSENBERG

25
```
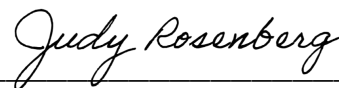
Cbu004-engineering-and-scientific 15:18
certain 96:13 107:13 125:8 139:6
certainly 13:4 14:5 16:12 19:14,17 60:4,13 63:12 68:8 69:10,19 71:23,25 72:24 76:14 83:2 84:3 91:3 100:16 102:5 120:3,16 146:24
certainty 50:7
certification 3:8
certify 160:4,8 162:9,14
cetera 86:3
chain 140:19
Chalmers 1:3 8:19 155:23
change 43:24 44:24 45:9 46:13,24 71:9 80:9 91:15 104:20 105:3 124:25 125:19 126:10,12,15
changed 43:15 45:5,21 46:9 63:24 84:23 85:2,13 126:19,25
changes 40:9 44:5,10,21 45:12,15 46:16 90:17,19 91:6,10,12,18,20 91:23,25 92:4,11 125:8,11,12
characteristics 57:14
charge 153:13
Charles 8:17 9:6 141:19
check 40:4 56:4
checked 39:7 42:9 132:4
chief 78:25
choice 118:7
choices 96:15,16
Chris 15:4
Christopher 1:19 5:23 6:12 7:23 8:5 160:15
chronological 21:24
Church 2:10
circular 101:3
cite 116:25
city 1:10 2:9 4:9 8:19 9:24 18:10,12 20:22 22:4,22,25 23:15 24:3,22 24:25 25:5,8,12,19,23 26:3,12 27:3,18 28:5,9,10 53:6 65:15,22 66:2,8,10,18 67:17,22 68:3,9,17 69:13 71:8 75:5 87:22 97:7,9 109:24 110:5,19 111:17 113:20 139:14
civil 1:21 151:4
claim 122:3,19
clarification 31:22
class 108:22
classified 90:4
clause 106:19
clear 27:12 33:7 38:5 40:12,15 87:5
clearly 80:25 127:14 138:19
clicked 16:17
clients 110:5,16 111:17,18
close 35:2
code 91:14 151:4
coding 53:4,7,13,18

coin 22:13
collect 68:24
collective 15:22 61:24 71:17 74:15 75:14,22 77:19,21 78:4,7,13,18 78:21,24 79:3,18 105:23
colloquy 153:10
column 47:8,13 56:12 69:22 131:20 132:8
combined 75:16
come 94:15 95:12 97:4,21 133:8
comes 95:9
coming 71:15
commission 115:12
commit 145:2
committed 139:20
communication 157:3
compare 49:11 51:10 54:19 55:14 57:9,17 103:23
compared 62:8
comparing 54:20
comparison 54:25
compensated 117:5
compensating 99:23
compensation 47:2 57:25 59:16,20 60:14 62:10,15,19 63:4,9 75:13 94:22 102:20 103:11 115:22,23 116:6,17 128:22 147:24,25 148:4 148:10,12
competitive 29:8,10 151:15 152:9 152:15 154:6,11,19
complete 11:23 113:24 114:3 125:11 130:4
completion 73:4
component 60:7 63:8 77:4
components 58:18,21 59:10 60:9,10 61:15 62:9,14 63:2
composition 48:15 49:18 51:6
compounds 82:25
comprise 62:14
compromise 104:25
Conceivably 116:24
concept 52:22 118:3
concerning 17:6 46:25 66:18 127:17
conclude 127:12
concluded 129:7 159:5
conclusion 116:2,14,19
Conditional 77:11
conducted 4:14
conference 4:19 5:22
confidence 23:12 113:23,25 114:3
confirm 132:4
confirmed 132:7
confusing 37:25
Connecticut 2:5
connection 56:24 112:17
Connors 1:3 100:9 152:23 155:23
consent 5:2

consider 31:3,8 54:13 85:25 95:19 149:9
consideration 85:3 87:4 97:19
considered 5:3 13:18 38:20 60:14 83:16 115:24 133:21 136:11,15 136:17
considering 137:15
constraint 55:5
construct 145:11
construction 11:13 12:8 17:7,13 37:10,20 38:4 39:20 84:14,23 85:4,19 86:2,23 87:6 89:9,13,14 123:6 124:14,21 125:4 126:23 128:5 144:9,23 146:2 148:4,12,17 148:20,22 149:24 150:3,6,15 151:22 152:3,7,13 155:9 156:19
consultant 21:6,15
consulting 28:10 30:20
contact 8:8
contain 17:16
contained 151:9
contains 40:18
content 17:10 32:7,9 118:20 149:11
contest 7:7
context 100:23
contingent 54:24
CONTINUED 109:16
contractually 79:11
contradiction 129:6
contradicts 128:14 129:21
contrary 122:4,21
contributed 18:18
control 4:20 78:23 79:5
controlled 74:4 77:25 80:20
controlling 74:21
controls 67:21
convenient 73:9
conversation 111:14
conversion 56:2
convert 54:21 55:16
copies 7:17 122:22
copy 3:14,17 4:8 14:16,23 67:9 69:2 108:9
copyright 108:15
Corporation 2:9,12
correct 16:2 25:7 33:3,6 35:19,20 39:6 41:7,10,14 42:8 43:8,9 46:12 47:24 51:24 52:20 53:25 54:8,15 56:20 58:3,10,11 60:5 63:16 64:11 65:5 67:24 70:21 71:2 72:11 74:3 77:2 80:23 83:13,21 85:7,14 86:14 87:16 90:11 115:22 118:13 119:13 123:18,25 125:25 131:18 136:3 137:20,21,24 138:13,14 139:23 140:16 142:2,5 142:14 146:14,21 147:10 160:9
corrected 38:20 42:3 52:4 65:2 82:10

correctly 47:16 56:3 57:21 71:4 131:16 143:2
correlation 70:11
COUNCIL 1:5
counsel 2:9,12 3:6,17 4:12,17 5:8 5:19 10:8 114:4 161:10
count 37:20 44:8 92:7 131:14 133:12 134:7,19,24 157:19
counted 27:13 46:10 131:8 132:24
counting 38:3,6 40:13 53:15 82:11 82:25 133:3,5 134:10
counts 35:9 36:20 37:9 41:20 43:16 51:22
COUNTY 162:5
couple 44:17 83:3 97:20 157:8
course 30:10
courses 30:2,6
court 1:2 3:13 4:16 5:9
covered 34:4 49:5
covering 15:23
CPLR 4:13
created 89:24
crime 130:10 141:11 142:23
criteria 90:8
criticism 68:19
criticisms 57:24 83:5
criticize 83:9 94:20
critique 19:4,15 54:11
critiques 83:14
critiquing 19:16
cross-referenced 145:14
crossing 29:18
crossover 31:12
Croushore 2:12 4:7 5:16,24 15:3,14 20:5 31:20 33:4 47:3 49:13,21 50:5,21 51:15 54:2 60:15,22 61:12 62:11 63:5 66:5,13,20 67:7 67:16,25 68:7,13 69:7,16 71:12 73:13,17 75:24 76:11 79:14,24 80:7 81:15 92:6 94:12 105:21 107:6 108:6 114:11 118:21 120:2 121:10,23 127:10 128:25 139:11 140:5,24 143:14 144:5 145:8 147:11 148:19 150:7,17 154:8 156:17 157:7,12 158:20,25 161:15
Cruz 22:12,16,21 23:19 24:5
current 74:14
currently 26:2
CV 8:5,11,14 21:17,20 22:7 27:6 97:11,13

D

D 3:2 160:2 161:12
D.C 2:5 6:21
danger 99:22
Darren 1:3 100:9 152:23 155:23
Darryl 1:3 8:19 155:23

dash 15:18
data 9:20 10:17 11:11,17,21,25 19:2,6,8,11,18,21 20:3,9,13,18 34:2,11 43:2 50:22 51:7,8,22,24 67:4,20 68:20 71:15 87:15,18,20 112:12,20 113:7,11,14,24 114:13 130:15 141:17 158:6,12,18
database 66:15,17 113:8 120:21,24 130:21 138:25 139:4
date 1:23 4:5 5:15 14:15,18 18:15 20:23 132:15 134:6 135:24 140:22
dated 8:21 9:8 132:17
day 132:9 160:19 162:20
days 3:16
DCAS 12:7
De 22:12,16,21 23:19 24:5
dealing 98:12
debate 75:12
decision 61:16,19
decisions 29:16
decrease 59:17
decreasing 59:21
deemed 4:3
defendant 1:11 2:10 98:18,19
define 31:18
defining 62:18
degrees 69:5
DeLarosa 131:8 135:17 136:13 138:10,11 139:18 140:17
demonstrate 143:16
department 2:9 17:3 32:24,24 35:11 41:6,6 45:12 47:11,21 50:17 51:11,12 52:14,15 53:23,23 56:9,9 58:25 59:2,7,7,12,14 60:3 61:3,10 63:23 68:4,5,6 69:6,14 74:11 75:20 79:12 88:4 89:10 92:5 93:15,21,22 94:10,11 95:4 102:7,7 119:25 135:9,14 153:6,22 153:24 154:17 155:3 156:8,15 157:24 158:2
dependent 76:19,21 77:6
depends 149:2 155:10
deposed 6:18 20:21 22:16
deposition 1:18 3:8,9,14 4:14 7:16 22:11 23:19 24:8 106:3 112:2,7 155:24
depositions 24:4
describe 8:11 32:16 35:14 64:19 98:11 126:9,10
described 8:23 9:19 11:11 15:17 124:19 126:15
describing 8:14 96:21
description 17:11,18 151:4 161:7
descriptions 121:6,19
designated 7:15,21 8:4,15 46:8
designation 45:16,22
designations 45:13 82:4

desired 106:16
determinations 64:15
determine 31:24 34:9 42:22 47:15 57:20 61:9 64:8 67:22 119:16,23 120:13
determined 56:17 96:19
determining 97:15 118:19,25
develop 121:21
deviation 49:3
dialogue 153:18
dictated 78:5
differ 127:14
difference 56:10 71:24 72:3,5,19,21 72:22,24,25 73:4 78:25 88:25 99:2 100:7,17,20 101:13 116:6,17 127:17 128:22
differences 16:25 46:19 53:22 56:15 58:2 60:19,20 63:22 84:11 102:11,12 127:24
different 50:7,12,18 51:6 61:9 62:3 69:11,19 71:20 78:22 83:14 101:19 127:2,4 128:10 130:9,13 130:14,20 131:9 133:4,22 134:2 134:17 141:9 143:5 144:21 152:2 157:15,22
differential 61:25 63:11,12 101:23
differentials 59:16,20 61:22 62:22 63:13,20 75:10 78:17 99:23
differentiating 115:15
differently 24:13 81:4
difficult 50:2,6 100:22
direct 99:20 122:2,18 129:2,5
direction 44:10
directly 121:19 128:14 129:21
director 8:8
disagree 76:20 118:23
disagreement 36:19 52:22,25 137:18
disagreements 36:24 52:19
discretionary 78:20
discrimination 26:17
discuss 33:5 54:17 120:18
discussed 19:18 75:10 120:7 128:3
discussing 75:11 81:7 120:15
discussion 56:23 118:25 119:20,22
disparities 58:22 59:25 64:10 71:10 77:17
disputing 48:4
dissimilar 116:16 128:24
distinction 110:20
DISTRICT 1:2,2,5
divided 47:10
division 110:3
DOB 36:9 44:21,24 45:8 47:9 48:14 49:12 50:2,11 58:23 63:23 65:15 66:4 68:5 69:3,12 107:18 114:23 114:24 115:2,8,11,13,18,21 116:4
document 7:22 8:6,16,22 9:2 15:16

16:5,22 **139**:13,14 **140**:23
documents **4**:2 **7**:15 **18**:5 **40**:22
    120:12 **123**:9 **161**:8,9,17,18
doing **18**:17 **19**:22 **60**:18 **101**:18
    110:17,18 **132**:23
dot **9**:20
double **37**:20 **38**:2,6 **40**:13 **53**:15
    82:11
double-check **107**:15
Dr **6**:16,24 **7**:14 **8**:17,17 **9**:5,6 **12**:21
    20:20 **28**:13 **33**:24 **45**:4 **73**:21
    108:5,5,9 **109**:18 **113**:16 **122**:22
    141:7 **144**:8 **157**:13 **158**:24
drawing **11**:23 **110**:21
drew **114**:14
dropping **46**:6
Drs **10**:25 **18**:11 **20**:2 **32**:14 **34**:14
    35:4 **38**:19 **40**:8,16 **42**:18 **43**:15
    45:23 **46**:18 **54**:12 **55**:25 **56**:6
    63:18 **64**:9,18 **66**:23 **68**:16 **74**:3
    81:21 **94**:21 **102**:19 **112**:15 **121**:3
    121:16
duly **6**:3 **160**:5 **162**:11
duties **31**:25 **32**:3 **121**:4,17,19

E

E **2**:2,2 **3**:2,2 **6**:2,2 **109**:14,14 **160**:2
    161:2,12 **162**:2,2
e-mail **17**:6,8,23 **18**:3
earlier **84**:20 **125**:2 **128**:18 **134**:20
    144:8 **157**:14
earliest **23**:5
earning **84**:18 **103**:20
econometrics **28**:19 **31**:11
economic **96**:10 **97**:24 **98**:12
economically **149**:7,22
economics **12**:20,23 **13**:4,10,23 **14**:6
    28:16,19 **29**:6,18 **31**:4
economist **33**:11 **99**:16 **129**:24
    155:7
edition **12**:20 **13**:6
education **65**:14,19 **66**:19 **67**:14,18
    71:8,21 **72**:21 **75**:4 **120**:6 **126**:13
    127:13,19
educational **66**:3,11,24 **69**:4,10
    86:11
EEOC **118**:10
effect **3**:12,15 **46**:3 **75**:16 **98**:20
effort **20**:16 **67**:12 **116**:11 **142**:12
efforts **54**:19
Ehrenberg **12**:19,22 **13**:12,17
    117:16
eight **76**:8
either **68**:10 **89**:2 **98**:6,9 **102**:13
    107:23 **115**:19 **117**:3 **143**:11,20
    150:21 **154**:14 **155**:18
electronic **66**:3,17 **67**:4,23,24 **68**:4
Electronically **123**:2

elements **60**:14
Eleven **82**:15
eleventh **7**:25
eliminate **143**:24
eliminated **37**:12
eliminates **144**:3
emergency **26**:18
employed **67**:14
employee **11**:21
employee's **99**:18
employees **77**:18 **90**:23 **103**:12
    118:12 **139**:8 **154**:5
employees' **99**:11
employment **69**:13 **101**:11 **139**:21
EMS **26**:11,18
encompass **98**:4
ended **19**:3
endurance **7**:7
engage **18**:12
engaged **18**:10 **27**:4 **97**:8 **101**:5
    111:8,19
engine **15**:21 **16**:17
enjoyed **102**:13
entire **11**:6 **52**:22 **115**:23
entitled **7**:22 **8**:2,16 **9**:5 **69**:23
entries **133**:11 **140**:11
entry **24**:6 **88**:17 **89**:3 **139**:15
enumerate **124**:25
enumerated **120**:10
equal **103**:10 **104**:2,14 **105**:6
    117:18
Erath **1**:19 **5**:23 **6**:12,16,24 **7**:1,14
    7:23 **8**:1,5,5 **9**:1 **10**:1 **11**:1 **12**:1,21
    13:1 **14**:1 **15**:1 **16**:1 **17**:1 **18**:1
    19:1 **20**:1,20 **21**:1 **22**:1 **23**:1 **24**:1
    25:1 **26**:1 **27**:1 **28**:1,13 **29**:1 **30**:1
    31:1 **32**:1 **33**:1,24 **34**:1 **35**:1 **36**:1
    37:1 **38**:1 **39**:1 **40**:1 **41**:1 **42**:1
    43:1 **44**:1 **45**:1 **46**:1 **47**:1 **48**:1
    49:1 **50**:1 **51**:1 **52**:1 **53**:1 **54**:1
    55:1 **56**:1 **57**:1 **58**:1 **59**:1 **60**:1
    61:1 **62**:1 **63**:1 **64**:1 **65**:1 **66**:1
    67:1 **68**:1 **69**:1 **70**:1 **71**:1 **72**:1
    73:1,21 **74**:1 **75**:1 **76**:1 **77**:1 **78**:1
    79:1 **80**:1 **81**:1 **82**:1 **83**:1 **84**:1
    85:1 **86**:1 **87**:1 **88**:1 **89**:1 **90**:1
    91:1 **92**:1 **93**:1 **94**:1 **95**:1 **96**:1
    97:1 **98**:1 **99**:1 **100**:1 **101**:1 **102**:1
    103:1 **104**:1 **105**:1 **106**:1 **107**:1
    108:1,5,5,9 **109**:1,18 **110**:1 **111**:1
    112:1 **113**:1 **114**:1 **115**:1 **116**:1
    117:1 **118**:1 **119**:1 **120**:1 **121**:1
    122:1,22 **123**:1 **124**:1 **125**:1 **126**:1
    127:1 **128**:1 **129**:1 **130**:1 **131**:1
    132:1 **133**:1 **134**:1 **135**:1 **136**:1
    137:1 **138**:1 **139**:1 **140**:1 **141**:1,7
    142:1 **143**:1 **144**:1,8 **145**:1 **146**:1
    147:1 **148**:1 **149**:1 **150**:1 **151**:1

    152:1 **153**:1 **154**:1 **155**:1 **156**:1
    157:1,13 **158**:1,24 **159**:1 **160**:15
erected **119**:12
error **9**:2 **75**:18
ESQ **2**:6,12,15
essentially **145**:20
estimate **21**:9 **24**:24 **27**:24
et **8**:19 **86**:3
evaluate **151**:19
events **101**:24
eventually **154**:12
everybody **62**:4
evidence **32**:15 **33**:2,9 **122**:4,20
Exact **48**:20
exactly **88**:22
exam **9**:19,22 **123**:23 **125**:24 **126**:11
    126:20,24 **130**:15 **131**:19,21
    132:2,12,17 **136**:3 **138**:20 **140**:14
    143:7 **145**:25 **146**:3,5,24 **154**:13
    154:14 **155**:19
examination **6**:8 **16**:19 **109**:16
    122:23 **155**:5 **157**:11 **159**:4
    161:13 **162**:10,12
examined **6**:5
examiners **123**:14
examining **121**:5,18
example **17**:4 **37**:14 **99**:13 **138**:10
examples **99**:21
exams **10**:18 **34**:2 **112**:12 **123**:6,11
    130:20,23 **131**:9 **134**:2 **136**:5
    145:11 **146**:10,17,22 **147**:2 **158**:3
Excel **9**:21
exception **131**:23
exclude **140**:18
excluded **89**:18 **135**:4
exclusively **143**:10
Excuse **44**:13
exercise **51**:19
exhaustive **145**:2
Exhibit **7**:21 **8**:5,15 **9**:4,11 **21**:16
    26:22 **32**:20 **33**:25 **38**:9 **112**:10
    123:17,19,20,23 **124**:2,3,5 **131**:3
    133:10 **135**:16 **136**:14 **138**:22
    139:25 **141**:18 **161**:6,6
exhibits **4**:3 **7**:16 **122**:24 **123**:10
    144:13 **161**:4,10
exist **68**:21
existence **16**:8
expect **100**:25
expected **101**:9
experience **65**:16,23 **68**:5,9,12,17
    69:14,18 **71**:8,21 **72**:22 **75**:5
    84:15 **85**:6,13 **86**:3,12 **120**:6
    127:13,19,25 **128**:10
experimental **86**:17
expert **7**:22 **8**:16,24 **9**:5,12 **21**:5,14
    27:17 **28**:8,14 **30**:17,24 **31**:4,8
    32:7 **51**:10 **97**:8 **98**:17 **110**:10,12

81:11,21 87:15,20 94:21 102:19
112:15 113:16 120:17 121:3,13
121:16
Goldstein's 20:2 64:9
gonna 155:19
good 6:16,17 9:17 21:22 106:16,23
141:3
gotten 34:25 158:15
graded 138:16
graduate 29:25
graduation 30:12
granted 76:16
great 33:19
greater 69:4 87:6 90:23 147:8
148:11
group 143:16
groups 57:10 77:17
guess 23:9,11 27:21 37:4,5 86:4
110:11
Guidelines 118:12,16,25
Gulino 27:9

H

H 6:2,2,2 161:2
half 21:4,6,13 27:25 28:6,7 102:14
102:17 103:4,13,18 104:16,24
halfway 42:11,14 66:16,19
hand 162:20
happened 17:14
happening 44:2
hard 61:21 67:9 69:2 82:14 150:10
harder 72:25
Harold 8:17 9:6
hat 135:14
head 10:12 51:22 96:22 121:12
headed 131:21 132:8
heading 82:15
heads 56:12
hear 112:6
heard 138:24
held 1:22 10:18 112:13
help 31:21
hereinbefore 160:11 162:11
hereunto 162:19
hesitant 26:8
high 70:14,25 71:4
higher 25:9 47:22 48:5 92:15 93:4
107:22 117:12,19,24
hire 53:24 74:5,16 78:12 80:22 86:6
hired 89:8 110:23 138:19 139:18
154:6,12,18 155:3 156:16
hires 52:16 56:8,19 154:10,11
hiring 153:13 157:25
Hispanic 45:17
history 139:21
hold 30:24
holding 34:3
holds 128:9

holidays 108:23
honorableness 101:10
hope 142:25
hopefully 157:9
hour 25:23 52:14 53:22 56:10
108:22
hourly 54:22 55:3,6,16,20 56:3 77:7
103:20 105:6
hours 102:14,22 103:5,13,18 104:9
104:17,24 105:6 106:9,15 109:4
HR 150:25 158:6
Hudson 133:15 134:8,23
human 12:2
hundreds 92:3
hypotheses 116:21
hypothesis 128:15 129:22 156:21
hypothetically 104:21 105:4 154:25

I

idea 10:10 101:22 107:20 146:25
151:24
identical 48:14 117:24
identification 4:5
identified 26:8 41:15 43:7 46:2,5
88:2 116:11
identifies 154:5
identify 20:17 41:13 58:12 96:18
141:7
identifying 151:10
ignoring 77:11
illustrate 134:16 136:10
imagination 13:19
immediately 138:13
impact 46:17
impacted 43:18
implements 60:12
implication 122:2,19 129:3
importance 62:8
impossible 105:22 149:4
include 29:21 58:16 67:5,14 74:10
90:25 92:21 106:11 142:19
included 28:18 61:17,19 67:2 89:16
91:5 92:10 96:24 101:2
including 55:10 66:8 71:7 77:14
111:17
incorrect 39:6 41:14,16 42:8 53:7
70:18 80:19
increase 46:11 59:15 76:4,9 78:6,11
78:20 79:22 80:4,22 90:24 92:21
103:22
increased 45:7 105:5
increases 59:15 75:21 76:13,15,15
78:15 90:13,18,25 91:2 92:12,25
93:2,5
increasing 59:21
increment 80:21
increments 60:21 61:7 76:24 77:10
incumbent 54:6 74:5,17 78:12

80:23 84:18
incumbents 52:16 56:8,19
independent 70:4,5
indicate 70:7,10 105:16 106:21
136:6
indicating 7:20
indication 42:18
indicators 74:10
individual 42:16,24 45:25 130:23
132:11,25 133:15 134:10
individuals 17:12,17 34:16 39:21
45:6 50:15 78:14 104:15 136:11
143:16 145:24 148:13
industrial 28:19,24,25 29:5,21,22
30:2
infer 108:18 115:19 121:7,20
122:13,17 153:17
informal 98:9
information 8:8 18:2 20:10 42:19
43:11,12,15 49:17 67:9,18,23
91:4 113:3,20 114:9 139:6 149:4
151:9 155:11 158:6 161:17,18
infrequently 115:18
initial 113:16
inner 153:12
inspection 14:8
inspector 11:21 12:8 14:8 16:16,19
17:7,13 32:23 38:4 39:20 50:2,4
50:11,17,20 83:17 85:5,20,21
86:2,23,24 87:6 88:4 89:9,13,15
93:10,11 94:9 100:11 114:23
116:4 119:25 120:9 123:5 124:14
124:21 126:23 135:8,20 136:22
137:2,10 138:8 139:10,19,24
140:4,7,15,19,21 141:25 142:7,13
142:17 144:9,23 146:3 147:10
148:21,23 149:8,23,24 150:3,6,15
153:3 155:9,17
inspectors 9:23 11:12,13 12:3 15:23
15:24 34:5 35:10,11,24 36:3,9,10
36:11,20,23 37:10,20 41:5 44:21
44:25 45:8 47:9,11,20,23 48:13
49:12 51:12,14 52:15 53:24,24
54:7,14 58:23 59:2,8,13,14 60:2,3
61:2,3,10,11 63:23 66:4 68:6 69:4
69:6,12,15 79:2,10,13,16 80:14
81:13,14,23,23 82:20,22,23 84:14
84:24 90:7 91:21,25 92:4,5,9,14
92:16 93:3,5,20 94:6,7 95:4,5
102:21 103:17 104:22 107:18
108:23 115:3,8,11,14,21 122:10
122:11 125:4 128:6 134:21 137:7
137:16 146:19 148:4,12,14
150:14 151:2,3,11,12,21,22,25
152:3,4,7,13 154:10,18 155:2,4
156:7,9,14,16,19 158:7
inspectors' 100:11
instance 29:14 53:15 67:11 86:7

90:9 134:8,15 137:19
instances 142:22
instructed 30:9
instructions 7:4
insurance 95:16 99:9,19
integrated 60:18
integrating 61:8
intend 111:10
intended 41:8 110:24
intent 89:21 126:17
intention 126:4
interaction 81:8
interest 28:18 155:8
interested 16:24 162:17
interests 143:17
interplay 29:7,9
interpretation 132:15
introduction 29:13
investigate 45:2
investigators 11:12
involve 22:21 101:12
involved 67:10 68:25 97:25 111:22
involving 150:25
IO 30:10,13,17,21,25 31:17 33:11
issue 81:6 82:25 90:22
issued 108:19 118:11 124:11,16
issues 82:3,18
item 9:19 11:8,20 12:6,11,18 14:7
  16:15 123:5,5,21,24 124:4

J

JAMES 1:4
January 132:17
job 31:14,19,24,25 32:2,7,8,11
  35:12 62:2 74:6,10,14,21 77:25
  78:23 80:21 95:3 99:4,5,18,22
  101:16 117:3,4,4,5,6,6 118:20
  119:9,10,17 121:4,17,18 130:13
  130:17 133:4 135:8 142:14,18,23
  142:25 147:4 149:10,15 153:5,21
  154:13 155:13 158:15,15,16
jobs 32:23 74:11 75:17 86:12 94:23
  99:12 114:23 115:2,7,11,16,20
  116:5,16 117:13,18,25 118:20
  119:2,3,4 120:4,13 121:7,20
  122:13 128:15,21,24 129:5,8,15
  129:23 130:9,9 134:17 136:7,12
  136:23 137:9,10 141:9 143:5
  147:2,8,10,13,16 150:12,13,19,20
  150:23 157:16,22
joining 68:10
joint 156:8,12,24
Judge 3:13
Judy 1:23 141:20 162:7,24
July 1:14
juncture 29:19
June 12:14

K

Katawba 131:8
keep 146:14 154:13
keeper 114:5
knew 61:5 154:9,10,17 155:2,12
know 6:18 7:9 10:7,9 12:16 13:22
  14:4,15,18 15:7 17:8,22,25 19:9
  20:14,14 23:23,24 24:17,20,24
  26:7,15 36:2 43:14 45:11,19
  49:17 51:21,23 53:21 54:3,7 59:6
  62:3,5,13,21,25 63:14,25 66:14
  68:2,14 69:3 71:19,20 72:7,13,15
  72:20 73:6,7 75:8 76:5,16,20 80:8
  82:3 84:4 85:24 86:15,20,20 87:2
  88:18 92:2,18 93:6,13,18,19,24
  94:18 96:23 98:7 100:2,3,4,7,24
  101:4,5,7,21,22 104:4 105:23
  107:11,16,19,25 110:14 111:6,9
  112:4,19,19,22,23 113:4,9 114:4
  114:6,6 118:14 124:10,16 125:10
  126:18,24 133:19 134:14,23
  135:2,10,12 136:20,24 137:3,22
  139:17 143:9 145:4,13,18 147:23
  148:5 149:14,17 150:12,22,23
  152:5,6,10,11,12 154:16,21,23
  155:12,18 156:10,11,23 157:4,10
  158:3
knowing 72:10
knowledge 5:21 31:25 44:20 65:25
  66:9 127:13
known 74:24 75:3
KSAs 121:5,18

L

L 3:2,2 160:2
L-Y-O-N-S 141:21
La 22:12,16,21 23:19 24:5
LabCorp 98:11
labor 12:19,23 13:4,10,20,23 14:6
  28:18 29:18 31:4 32:15 33:2,8,10
  99:15 129:23 155:7
lack 116:3,5,8 119:9 120:15 128:13
  128:20 129:8,11,16,20
large 52:21 152:12
largely 71:5,14 80:15 155:15
larger 63:8,13,15 113:7 158:5
late 85:2 140:25
law 2:9 5:4 6:20
lawsuit 27:8 100:23
lawyer 6:20
learn 156:14
leaving 68:22 74:23 75:2
length 58:8,8 59:3 60:11 63:2 76:18
lesser 58:14 60:12
let's 11:20 15:15 21:12 38:8 46:15
  64:3 84:9 88:20 103:16 108:3
  109:8 122:12 130:2 135:16
  136:22 139:22 145:15 154:24

level 29:16 37:22 83:20 88:3,12,18
  89:3,5,9 90:3 93:16,17
levels 71:6,13
Lexis 26:11
Lieder 2:6 5:17 6:9,20 15:5,11
  73:16,18 81:19 108:2 109:7,17
  141:20 157:5 158:10,22 161:14
likelihood 83:19 84:2 149:3,9,14
limitation 134:6
limited 36:22 88:8,15
limiting 119:21
line 24:7 130:7 131:17 161:23
lines 62:24
Lionel 133:15
list 26:21 27:3 28:4 97:12,13 109:23
  112:18 123:4,18,21 124:23
  125:23 134:13 135:10,17 145:3
  147:12
listed 9:19 18:6 27:5,10 28:4 42:15
  42:23 79:17 84:12,13 87:3 97:18
  123:24 124:4,7
listings 22:20
lists 41:4
literature 99:24 103:7,9,23
litigation 5:5 22:21 101:6 111:22
little 26:25 74:14,19 77:14 82:14
  112:16 120:20 145:19
LLC 6:14
Local 1:5 26:11
locations 4:18
long 19:7,14 21:10 113:19 145:24
  146:4,4,6
longer 76:2 86:21 145:20
longevity 16:8 61:22 63:11,19
  75:10,13 76:13,14,24 77:9 78:16
longitudinally 90:14
look 18:25 20:9 27:3 32:19 38:8,10
  41:25 46:3 47:6 50:23,24 53:4,17
  55:7,20 56:5 61:14 62:6,7 69:21
  70:12 71:2 90:17,18 93:9 96:10
  96:14 97:13 98:10 101:6,19,20
  104:3 108:3 120:12 123:3 131:2
  138:21 146:9 147:15 148:6
  151:18 153:24 154:3 158:5,11
looked 44:19 53:13 58:6 60:4,8
  92:24 102:3 104:5 109:21 114:13
  120:3,23 134:20 141:8,15 142:18
  144:8 158:3
looking 13:21 16:24 42:13 51:17
  52:7 53:9 57:3 87:2 90:12 92:23
  93:7 97:24 100:2,4 108:8,25
  110:22 114:17 120:21 122:8,18
  128:12 132:21 133:2 134:11
  138:7 157:25
looks 32:21 123:22 124:9 133:12
losing 99:4,5
loss 97:24 98:12
lot 23:12 99:6 134:17

lots 13:9 15:25
low 44:7 70:13,25 71:3
lower 25:9,10,12 88:3,12 89:5 96:5
lunch 109:8
luncheon 109:11
Lyons 141:19,20,22 142:11

M

Main 6:14
mainstream 13:20
maintain 66:2 68:3
maintained 128:15 129:22
maintains 66:10,18
major 74:25
majority 136:16 143:19
makeup 49:11 51:11
making 20:16 104:6 122:3 131:14
manager 148:17
managerial 92:22
mandate 80:16
mandated 79:6,11
manipulations 87:23
manner 4:24
March 136:6
marked 4:3 9:3 21:16 38:9 122:24
    123:10 131:3 133:10 138:22
    144:12 161:22
market 29:8,10 32:15 33:2,8 100:7
    101:23
marriage 162:16
Massachusetts 6:15
master 27:11
matched 36:15
material 106:4
materials 8:2 9:13 11:9 15:15
    112:18 123:4
math 52:24
mathematical 62:21
matter 98:13 115:12 134:7 162:18
matters 22:17 26:3,6 75:9,9
mean 13:15 20:7 28:23,25 29:3,4,9
    29:20 31:16 32:8,18 44:11 51:16
    51:17 53:12,14 62:17,18 72:20
    89:5 91:8,9 96:3 99:20 100:22
    101:17 104:6 105:11 114:12
    117:15 124:23 125:15 130:12
    138:6 148:20,25 150:8 151:13
    154:2 157:2
meaningless 71:5,14 80:15
means 67:13 99:16 118:19
meant 84:8 142:24 153:4 156:24
measured 69:5
mechanism 152:2
medical 26:18
meet 50:3,10 84:12,22 85:19 86:11
    86:16 90:8 148:14 149:23
meeting 4:19 84:16
meets 120:9

Mehri 2:4 6:21
Members 1:6
memory 139:21 145:3
MENDEZ 1:4
mention 106:5
mentioned 55:22 102:11,12 150:18
merely 17:17 106:17 134:16 136:10
mess 101:3
messed 124:6
met 27:11 50:25 51:4,17
methodology 57:9 83:5 112:24
Michael 2:6 6:19
middle 126:9 130:3
Mike 15:4 81:16
mind 20:24 73:8 75:7 84:4 106:22
    106:24 154:23
minimal 49:25
minimum 50:3,11,25 51:4 79:17
    84:22 86:11 120:10 121:8,22
    122:15 124:19 136:21,25 148:6
    148:14 149:23
minimums 79:11
minorities 50:16,19
minority 41:5 45:13,17,22 46:8,10
    46:11 51:14
minute 14:24
minutes 44:17
missing 43:12 124:8
misspecification 75:18 77:5 80:19
    80:25 81:5
misspecified 77:13
misstate 83:24
mistake 37:15
mobility 121:8,21 122:14
model 67:3,6,15 77:4,13 80:16,25
    81:3
Modern 12:19,23 13:4
moment 33:15
moment's 7:20
money 103:24 104:14 118:8,8,9
month 22:18
morning 6:16,17 109:20 112:17
    117:17
motions 90:13,17
move 74:16 84:18 116:11,13 119:4
    142:13 155:20 158:8,13
moved 37:21 138:8 158:2,18
movement 116:3,8 119:3,9,12,17
    119:24 120:15 128:14,20 129:4,8
    129:11,17,21
moving 135:8
multiple 64:19,23 65:3,8,18 69:25
    73:22 86:10
multiple-choice 127:6

N

N 2:2 3:2 109:14,14,14 160:2
    161:12

name 6:10,19 8:7,7 9:7 26:10 139:2
    151:8
named 27:8 156:2
narrow 146:2
Natick 6:15
nature 32:13,17 95:15
near 10:15 14:12 106:2
nearly 130:4 143:6
necessarily 110:15
necessary 111:13
need 33:16 77:12 83:7 155:19
needed 19:16 32:2 88:11
needing 155:15
never 27:12 110:25 111:20 112:2
new 1:2,10,25 2:9,11,11 4:9 6:4
    8:20 9:24 20:22 22:4,22 23:15
    24:3,23 26:12 27:18 28:5,9,11
    29:13 52:16 53:24 56:8,18 66:2,8
    68:3,9,12,17 69:13 71:8 74:5,16
    75:4 78:12 80:22 97:7,9 109:24
    139:7 162:4,8
nine 12:6 22:21 23:14,25 28:3 35:6
    109:22
NOE 126:11 144:17
NOEs 69:11,19 120:3,11 121:9,22
    122:16 123:6 124:21 144:9,12,22
    145:25
non-associate 37:22 88:3
Non-Party 1:19 2:10
noncompetitive 151:16
nonmanagerial 91:6,9,15
nonpecuniary 94:22 95:3,14,20
    99:11,17 101:16 102:11
nonpromotional 91:24 92:12,25
nonsalaried 102:10
nontestifying 110:13
normal 7:4 25:2,6,16
normally 13:18 25:9
North 6:14
Notary 1:24 6:4 160:23 162:7
note 36:5,18 80:13 139:12 157:14
noted 34:13
notes 36:15,17
notice 1:21 7:20 16:18 22:19 85:5
    124:15
notices 122:23
noting 122:20
NOVA 1:4
NS 11:12
number 8:20 9:8 15:6,16 27:20
    34:9,22 35:9,11 40:4 44:2 83:16
    101:19 110:23 111:8 123:23
    130:20 132:24 133:4,22 152:17
numbers 35:18,23 36:24 38:14,15
    38:20,21,24,25 39:5,14,17,25
    40:10 41:15 42:3 47:15 52:20,25
    64:6,13 65:3 71:4 94:19 116:13
    116:14,15

NW 2:5

_____

O

O 3:2 6:2 109:14,14,14 160:2
O*NET 120:21,24
O*NET-based 122:7
oath 3:12
object 60:15 140:25
objection 5:13,14,16,17 20:5 31:20
  33:4 47:3 49:13,21 50:5,21 51:15
  54:2 60:22 61:12 62:11 63:5 66:5
  66:13,20 67:7,16,25 68:7,13 69:7
  69:16 71:12 75:24 76:11 79:14,24
  80:7 92:6 94:12 105:21 107:6
  114:11 118:21 120:2 121:10,23
  127:10 128:25 139:12 140:5
  143:14 144:5 145:8 147:11
  148:19 150:7,17 154:8 156:17
  158:10
objections 3:21
observation 135:13
observe 114:25
observed 88:16 130:20
obtain 113:3
obtained 10:17 34:2 112:12
obtaining 113:6
obvious 84:11
obviously 41:19 104:7 125:17
  128:10 132:20
occur 78:6
occurred 23:19 43:24
occurrences 101:20
occurs 141:18
OES 11:11
offer 153:6,21
offered 147:2 150:14 153:19
office 2:9 153:12
officers 26:12,17
official 139:14
oh 52:9 70:21
okay 7:12 9:16 26:19 27:23 33:21
  39:13 42:14 44:14 52:13 73:16
  87:21 108:12 109:7 110:11 118:6
  134:12 149:20 158:20
omitted 55:18 77:4
once 40:22 89:23
one-issue 105:24
ones 36:2 97:18 123:14 133:6
  141:10 157:8
online 12:21
open 40:22 120:9 150:10
opened 108:13 146:13
openings 138:17
operator 130:11 134:9,10,12
  141:11
opining 104:10,13,18
opinion 13:16 128:19 129:20 155:6
opinions 16:6,22 46:17

opportunities 90:24 93:8
opportunity 147:7,9 157:3
opposed 13:12 21:15 32:11
order 4:8 21:25 125:23 155:16
organization 28:20,24 29:5,23
organizational 29:21 30:3
original 3:9,17 35:5 40:14,17 57:2,4
  64:17 73:24 82:5,24
outcome 46:24 92:13,17 162:17
outcomes 17:15 96:15
outside 154:19
overpowering 13:14

_____

P

P 2:2,2 3:2 6:2 131:23 132:2
p.m 109:12 159:3
package 115:24
page 7:25 9:12 10:14,15,16 11:18
  14:12 18:7 21:19 28:14 32:5,19
  33:25 34:13,18,19 35:17 37:8
  39:9 40:18 42:11,11,13,15 48:9
  52:4 64:18 83:9 84:11 85:9 97:12
  102:22 106:6 108:15 112:10,11
  114:18 123:3 124:13 125:22,22
  126:9 127:11 130:2 152:18 161:7
  161:13,18,23
pages 35:6 64:24
paid 55:8,10 61:4,4,11 71:16 79:3
  79:10,17 98:6 103:19,25 108:23
  114:24 115:12,21 150:2
pandemic 27:15
paragraph 10:16 14:13 28:15
  34:19 48:11 84:10 102:24 106:6,7
  114:18,19 126:10 128:12,13
  130:3,5 143:4
paraphrase 126:16
part 40:8 53:8,10 54:11,16 107:10
  121:24 122:5 154:22
partial 11:7 67:18 114:19
participating 4:18
particular 16:21 17:23 31:24 81:6
  85:18 151:18
particularly 38:3 79:6
parties 3:7 4:12 5:2 162:15
pass 155:14,16
pay 16:8 54:19 55:10 58:9,17,21
  59:4,10 60:2,12,19,21 61:7,9,15
  63:2,9,22 75:21 77:4,7,17 90:13
  90:24 96:13 103:22 105:4 107:22
  117:18,19 139:7,15 150:15,20,23
paying 117:12,24
payment 58:10
payments 58:14
pays 119:10
pending 7:11
Penzance 11:7
people 34:3 37:11 50:24,25 55:7,9
  62:2 67:10 68:25 71:16 75:20

  89:15,25 90:4 96:15 105:19 115:5
  116:12 117:11,19,23 135:4,8
  137:8 138:4,7 147:20 157:18
percent 37:2 47:22 48:5 62:14,15
  63:3 143:7 152:7
percentage 27:16 41:4 45:7 47:9,10
  47:20,22 50:9,12,15,18 70:3
  89:25 92:15 93:4 107:21 152:13
percentages 41:13,16,19,20,23 42:8
  43:19 46:11 51:13
Perfect 70:11
perform 32:2 62:20 65:18
performed 31:14,18,23 32:10 43:21
  49:10 57:21 64:20 122:8 134:22
period 10:20 14:22 34:10,16 48:5
  85:3 87:4 88:9,13 112:14 125:3
  125:24 126:6 127:22 135:15
  144:24 145:16 146:5,7,18,20,21
  147:3
person 46:5 131:8,10 153:13
  156:25
personnel 29:16
persons 9:23 88:2 113:6 117:5
  133:13
pertained 121:25
Pfeil 98:11
Ph.D 7:23 8:6 28:16
phrase 29:4,22 98:4
physical 7:17
physically 5:11
pieces 111:21
Pirates 11:7
place 47:4 87:3 98:22 99:10 103:9
  124:24 160:11
plaintiff 27:9 98:18,23 100:9
  152:23 161:4
plaintiffs 1:7,20 2:4 5:18 6:22
  114:22 129:19 155:25 156:3
plaintiffs' 4:3 128:14 129:3,22
plans 24:17
platform 4:20
please 4:9 6:10 7:8 27:23 81:16
  141:2
PLLC 2:4
point 19:19,21 46:2 70:6,13,14,19
  70:19,22,25 71:2 72:11,11 73:9
  88:7 89:5 104:6 115:25 120:16
  128:9 149:21 155:20
Policy 12:24
pools 49:15,19
poor 50:19
populated 66:3,19
portion 32:13,18
position 10:19 17:7 32:13,22 34:3
  37:22 83:18 88:4 89:15 112:13
  114:25 119:24 124:22 139:7
  141:25 142:6,12 143:25 144:10
  149:25,25 150:2,4,5,6,16 153:3

153:20 155:15 157:19
positions 17:4 69:20 84:25 114:24
  115:18 116:4 117:6 119:25
  127:15 136:15 138:2,4 140:18
  144:23 148:16,18 153:25
positive 100:5
possibilities 72:14
possibility 72:10 93:9
possible 71:23 72:2 78:9 96:6
  116:21 119:8 129:10,13,18
potential 143:17
pre 68:4,12,17 69:13 71:8 75:4
pre-FDNY 65:15
pre-New 65:15,22
precisely 34:25
predominant 44:24
predominants 45:3
preface 36:14
preferred 107:22
preliminary 18:23 19:6,8,11
prepare 7:24 8:10 10:3,4,6,7 24:9
  111:25 112:24
prepared 8:12 10:10,11 17:22
  18:19 22:7 112:19,23
preparing 18:2
preponderance 111:4
prescribed 153:19
presence 5:12
present 2:14 4:12 33:9 56:7
presented 33:2,10
presenting 92:18
presents 35:9
presumably 53:6 101:17 149:7
Presuming 61:13
presupposes 148:25
pretty 33:7 87:5
prevalent 92:8
previous 19:3 55:23 149:18
previously 122:24
primarily 122:14 127:18 151:20
  152:2
primary 95:17 118:19 137:16
prime 142:19,20
principles 13:24 14:3
prior 19:18,21,25 68:9
probable 72:4
probably 18:20 26:24 94:8 126:16
problem 53:16 74:25
problematic 36:7,12
Procedure 1:22
Procedures 118:13
process 151:10,13,15,16,19 152:9
  152:15 154:6,20 155:5 158:17
processes 156:15
produce 12:10
produced 12:2,14,17 19:2 53:5,5
  87:18,22
product 29:13

programming 57:20 65:7
promoted 83:20 92:19
promotion 84:2 91:11 92:20 93:10
promotional 90:25 92:11,25 132:2
  140:14
promotions 87:11 91:5 92:24 93:15
  94:9,15
prompt 153:23
proper 49:14 54:21 60:7
properly 49:11
propose 66:22 68:15
proposed 99:16
proposition 105:25 117:3,10,11
protection 9:23 15:23,24 34:4
  35:10,23 36:3,9,11,20,23 47:23
  50:4,20 54:13 60:2 61:2,10 79:2,9
  80:14 85:21 86:23 90:7,10 91:21
  91:25 92:14 93:3 94:5 102:21
  103:17 104:22 134:21 135:20
  136:22 139:10,19,23 140:3,7,15
  140:19,21 141:25 142:7,13,16
  146:19 148:13 149:8,23 150:14
  151:2,11,21,25 155:2 156:7,14
provide 156:13
provided 113:11,12,15 114:10,16
  131:7 149:5
provisional 151:15 152:8 153:4,14
  154:9
provisionally 152:14 153:5,20
  154:7,12,19 155:4,13 157:25
  158:15,16
psychologist 31:17 33:12
psychology 29:3,22 30:3,10,14,18
  30:21,25
Public 1:24 6:4 12:23 160:23 162:7
publicly 139:4
pull 7:19 141:17
purport 42:2
purports 35:13 47:8,18,25
purpose 5:5
purposes 16:10 154:24
pursuant 1:20 4:13
put 15:20 16:17 80:24 81:2 100:6
  134:6 135:13
puts 155:14
putting 55:19 74:24 96:6,8 103:3

Q

qualification 84:23
qualifications 17:2 51:2,5,18 84:7
  84:13,14 136:21,25 137:4,23
  148:7,15
qualify 59:3 83:17
quantify 73:2 96:16
question 7:10 19:3 26:9,20 54:23
  60:16 62:19 69:9,18 81:17 96:11
  100:24 111:13 116:7 121:24
  122:6 137:14 141:2 144:7,21

148:25 149:18 150:11 154:25
  161:23
questions 157:6 158:21,23 161:22
quick 157:8
quite 35:2
quote 100:8 101:8 155:22
quoting 152:22

R

R 2:2 3:2 6:2,2,2 69:23 70:2,13,24
  71:7,13 109:14 160:2 162:2
race 42:15,20,23 43:6,10,12,16 45:5
  45:18 46:2,5,19
racial 26:16 45:16,22 48:14 49:11
  49:18 50:16 51:6,10
raise 83:14
raised 82:23
ran 81:21
random 67:9 68:25
range 70:25 96:7,20 99:10 143:17
ranges 96:9
ranging 130:9
rarely 105:24
rate 25:2,5,6,13,17 55:3,6,16,20,21
  84:19 91:20 101:2 103:20 105:5,7
rates 25:9 54:22 56:3 79:5 101:7
ratio 48:4
rational 149:7,22
rationality 115:13
ratios 48:8
reach 13:8 73:9 112:8 115:25
  116:19
reached 46:18 128:19 138:17
reaching 16:5
read 75:14 118:22 119:5 120:17
  155:24
real 116:5,17
realized 77:10
really 18:16 71:18 86:20 97:23
  137:5 145:22 157:8
realm 72:14
reason 13:11,14 50:8 51:3 90:12
  111:23 128:20 129:10
reasonable 96:7,9 132:14
reasons 50:14 129:13,16
rebuttal 9:5 37:17 38:8 39:10,11
  40:23 41:25 43:20 47:7 52:5,8
  56:5,25 64:4 65:4 69:21 73:25
  74:9 82:12,20
recall 13:2 16:11 17:24 18:13 21:3
  23:9 37:3 53:9 91:16 107:9
  113:22 118:24 119:19 133:7
  134:5 146:8 151:3,7 156:11
receive 59:9,13 62:3 78:15
received 10:8 18:21,23 20:4 28:16
  58:23 59:9 61:6,6 76:3,9 79:21
  80:4 92:15 93:4 103:12 104:15
  113:15 150:24 153:5,21

receiving 19:25
recess 33:22 73:19 109:11 141:5
recited 71:3
reclassified 89:12
recollection 20:24 25:14 36:6,13
    53:19
record 5:9 6:11 66:3,11 67:23 68:4
    68:8,11 73:18 109:9 162:12
recorded 4:24
recording 4:25
records 67:24 69:2 113:2 114:3,5
recruitment 106:5
redefined 92:20
reduced 85:5,14
refer 10:24 58:7 144:17
reference 10:23 17:5 28:24 124:13
    156:11
referenced 14:12
references 153:2
referred 10:14 11:18 13:12 141:9
referring 10:25 12:24 17:9 48:18
    48:24 49:4,7 131:11
refers 12:18 16:16 143:5
reflect 91:20 138:2 140:2
reflected 74:9
reflects 138:4
regard 38:3
regression 64:20,23 65:3,8,19 69:25
    73:23
regular 38:15 106:17
related 23:23 162:15
relation 70:8
relative 57:7 62:8 101:7 116:3,8,8
relatively 14:19 85:2
relaxed 88:23
relevance 74:14,20
relevant 57:16 68:22 69:13 74:23
    74:24 75:3 76:25 97:19 135:15
reliably 13:23
reliance 106:4 123:4
relied 8:2 9:13 11:9 15:16 18:6
    87:19
reluctance 100:10
rely 112:18
relying 145:5
remain 155:16
remains 77:13
remember 20:20 30:7 83:11 94:23
    100:13,14,14 107:5,7,8 109:21
    110:7,8,9 119:6 135:7 143:2
    144:10,14 151:8
reminding 7:6
remote 4:17
remotely 4:15
render 44:3
reorganization 89:12
repeat 81:16
rephrase 95:23

replicate 34:21 35:17,21,22 36:4,25
    38:23 39:16 41:22 42:4 47:14
    53:2 56:14 64:5,12 65:10
report 7:22,25 8:16,24 9:5,9,12
    10:15 11:18 14:13 16:5 18:9,11
    18:18,21,24 19:4,13 20:2,14
    24:10 26:11 28:14 32:6,14,16,19
    33:3,6,9,25 34:14 35:5,6,17 37:11
    37:17 38:9,19 39:10,11 40:14,17
    40:24 41:12,25 42:10,10,14 43:19
    48:10,12,20 51:13 52:3,5,8,13,18
    53:25 54:6 56:5 57:2,4 58:7,17
    64:4,17,22 65:5,13 69:22 73:24
    73:25 74:13 81:24 82:5,9,13,20
    82:24 83:10,15 84:20,21 85:10
    96:25 112:3,5,10 113:17 114:18
    116:25 121:16 122:3 124:14
    130:3 138:6 144:18 152:19
    157:14
reported 42:17,24 73:23 74:2
reporter 4:6,16 5:10
Reporting 4:21
reports 111:25 120:17
represent 5:20 6:22 15:20 131:5
    133:10 139:3 147:19
representation 142:8
represented 104:24
representing 97:7,8 98:17 105:17
represents 131:17
reproduce 125:16
reputation 100:17,20 102:6
reputational 101:24
reputations 100:12
request 113:10,12,14 114:4
requested 113:13,19 161:17
require 84:15
required 84:12 106:10 107:3
    108:24 127:20
requirement 85:18,20,21 87:7
    126:13 128:7 154:15
requirements 49:25,25 50:3,11
    69:10,18 71:20 72:23 84:16 85:2
    85:12 86:5,12,16,18,24 87:3,5
    120:7,10 121:8,22 122:15 124:20
    124:24 125:23 126:19,24 127:14
    149:24
requires 121:11
reserved 3:22
resources 12:3
respect 82:23 85:17 126:23
respective 3:6 94:16
respond 29:13
rests 48:12
results 64:22 71:9 73:5 81:24
retained 22:25 24:22 26:3,13
    161:10
revealing 110:15
reverse 21:24

review 18:10 19:6,8,11 57:19 65:7
reviewed 8:22 16:12 37:16
reviewing 43:2 71:15
revised 40:24
revisit 109:19
revolves 111:2
Rich 2:15 6:22
Richardson 20:21 66:9
right 6:25 7:18 8:3 13:15 21:2,7
    23:16,20,21 29:23,24 31:5 32:21
    37:23 38:2,22 41:17 44:4,23 45:8
    52:16 55:11 58:14 59:4,18 60:9
    64:16 65:16 70:15 74:6,11,17
    75:14 76:22,23 78:6,17 79:13
    80:6 82:5,6,12 84:2 85:11,15,22
    85:23 86:7 87:24 88:5,10,14,22
    88:23 89:7 90:14 91:7 95:11
    102:8,9,15 104:12 108:8 109:3
    110:11 111:21 115:8,14 122:16
    123:16 125:9 126:2,11,12,20,21
    127:24 129:14 130:18,19 133:12
    136:18 137:10,11 138:18 140:21
    144:16,18 145:21 150:21 157:16
ring 26:14 135:14
Robert 12:19
ROCKLAND 162:5
role 129:23
Ronald 12:18
ROSEMOND 1:4
Rosenberg 1:24 162:7,24
rough 21:9,11 24:24
roughly 20:25 21:4,13,24 22:2,3,8
    23:4,6,13,17 26:24 110:6 111:16
    130:3,8 144:3 157:15
rule 120:4
Rules 1:21
RULINGS 161:22
run 99:7

_____
S
_____
S 2:2 3:2,2 6:2 109:14,14,14 161:2
safety 100:3
salaried 55:21
salaries 54:21,22 55:15 57:9 61:6
salary 52:14 53:23 54:19 55:3,11
    55:21 56:2,7 58:2,6 60:4,6,20
    61:16 62:8,23 63:4,8,12,20 76:22
    76:25 77:7,8,15 78:15 90:17,18
    90:19,20 91:2,6,9,13,15,18,20,24
    92:4,11,12,21 93:2 105:8,19
sample 67:10 68:25
satisfy 86:22
saw 26:10 44:2 61:13 107:14
saying 36:10,14 40:13 42:7 43:3,5
    53:18 85:17 88:19 117:17 128:23
    129:2 130:16
says 11:21 12:7 52:17 101:8 108:22
    111:9 114:21 142:3 143:6 153:21

schedule 98:8 99:3 106:18,23
    107:10
Scherbaum 8:18 9:7 11:2 18:11
    32:15 34:15 38:19 42:19 45:4,24
    46:18 52:3 54:12 56:2,6 59:22
    63:19 64:19 66:23 68:16 74:4
    77:3 81:11,21 87:15,20 94:21
    102:19 112:15 120:17 121:3,12
    121:16
Scherbaum's 20:2 35:5 40:9,17
    43:16 64:9 113:16
scientific 101:18
score 48:19 49:4
screen 7:18
sealing 3:7
search 15:21 16:17 142:21
second 9:18 10:17 34:19 83:18,25
    153:2
second-to-last 102:23
secondary 68:23
section 4:13 32:18
see 9:18 10:16,21,22 11:15 14:9
    19:16 20:9 22:13 28:21 33:21
    34:6,17,20 35:8 37:13,14 38:13
    38:16,24 39:14,19,21 40:5 42:18
    42:20 47:7,12,13 48:16 53:6 56:6
    56:11,21 58:21 69:23 70:24 74:20
    88:24 98:14 102:25 108:2,14
    114:20 123:4,7 127:15 128:16
    129:4 130:7,8,24 131:21,23
    132:16,18 133:14,17 135:7,18,20
    135:23,25 136:14 139:4,8,15
    141:13,18,22 143:6 145:9 152:21
    152:25 153:7,15 158:8
seeing 151:7 153:12
seeking 115:6
seen 66:6 130:14
SeeThroughNY 138:25
seldom 120:25
selected 151:12,25 152:8,14
selection 118:12 151:20
send 15:10,12 108:4,7 113:21
sense 77:9 148:15,24 150:4,8
sent 108:3
sentence 10:17 22:9 28:16 48:11
    102:23 114:21 117:17 127:12
    128:11 141:8 143:6
separate 4:17 90:9
separately 12:10
sequence 82:8
series 38:10
serve 21:14
service 3:16 26:18 58:8,8 59:3
    60:11 63:2 76:18 151:4
set 20:23 67:24 122:15 124:20
    125:11 158:6 162:11,20
sets 13:23
setting 27:15 78:16 80:16 96:5

seven 123:5
severe 77:5
short 33:22 67:12 73:19 99:7 141:5
shorter 98:8 99:3 145:18
shorthand 125:18
shortly 15:2 18:20
show 28:3 47:8,18 48:2 84:21 125:7
    139:9
showing 10:18 12:2 112:12
shown 41:23 91:18 97:12
shows 9:22 39:21 139:6 145:5
sign-up 62:4
signed 3:10,12,15 120:22
significance 56:11,18 64:14
significant 56:15 63:22 64:11 71:11
    73:5
signify 70:2
similar 32:25 114:23 115:11,20
    117:4,12 118:20 119:2,11 120:13
    121:7,21 122:14,18,20 128:16,21
    129:9,15,23
similarity 116:5 121:4,17
similarly 1:5
simply 20:8 101:12
simultaneous 24:4
simultaneously 22:12 23:20
single 42:16,23
sit 39:4 42:6 59:6 72:8
situated 1:5
situation 78:21
situations 77:18 111:19
six 11:8 79:20 80:3
Skalet 2:4 6:21
skills 31:25
small 62:2
Smith 12:19,22 13:12,17 101:8
    117:16
somebody 134:2 158:14
somewhat 37:25
soon 33:21
sooner 84:18,19
sorry 34:18 39:11 44:13 45:14 52:8
    52:12 60:20 81:15 123:16 125:3
    140:6,24 148:22,23 158:11
sort 29:17 51:25 54:25 62:20 96:17
    139:13 158:6
sorts 100:25 101:24
sought 31:22 67:8,19 127:25
sought-after 16:25
sound 8:13 44:23
sounds 8:3 21:2,7 38:22 85:11
    144:16 151:17
source 17:25
sources 145:14
SOUTHERN 1:2
speak 46:21 47:4 106:24 121:13
speaking 63:10 95:16 153:12
special 27:11

specialist 130:10 141:11 142:19,20
specialized 17:3
specific 32:10 36:5 40:4 95:25
    107:8 119:19 141:10
specifically 16:12 37:3 41:18 53:9
    75:7 91:16 111:9 125:5 132:13
    133:25
specification 80:10,12
specificity 151:5
specifics 122:10
specified 74:22 75:21 160:11
specify 75:15 77:9,12 78:14,19
speed 97:20
spelled 141:21
spend 19:7
spent 20:11 120:20
spreadsheet 9:21,22 10:4,13 11:22
    12:8,10 42:16,23 43:4 112:20
    113:8,24 114:14,15 131:6 133:13
    141:15 142:4,21 143:20 145:5
squared 69:23 70:2 71:7,13
squareds 70:13,24
SS 162:4
stage 112:8
standard 49:2
standing 156:25
stands 132:2
start 18:17 50:13 64:19 84:9 106:2
    149:18
starting 22:20 64:18 88:6
starts 32:7
state 1:24 6:4,10 18:9 34:15 35:16
    37:8 48:10 52:18 65:13 68:12
    74:13 84:10 87:14 102:18 118:18
    139:7 162:4,8
stated 14:4 60:5
statement 106:17 133:21
statement's 154:22
STATES 1:2
static 83:10,15
statistical 48:12,19 56:11,17 64:14
statistically 56:15 63:22 64:11
    71:10 73:5
Statistics 31:9
STENOGRAPHER 4:10 5:19
step 51:24
stipulate 5:8
stipulated 3:5,20 4:11,22
stopping 73:9
Street 2:10 6:15
stretch 13:19
struggling 59:19
studied 10:20 50:22 51:7 69:8,17
    112:14 144:6
studies 96:11 100:2 121:21
study 29:12 51:9 86:25 101:18
    121:8 127:22 150:18
subject 55:22

120:12 133:22 136:7 137:9 138:2
   138:3 147:2,8,16
typical 78:10 101:22,23
typically 79:10 96:12

_____ **U** _____

U 3:2
ultimate 98:21
ultimately 18:19
unauthorized 5:3
uncommon 112:8
undergraduate 30:5
underlying 114:13
understand 9:15 20:17 38:18 40:8
   40:10 61:23 81:20 87:12 115:5
   131:16
understanding 10:2 12:13 22:10
   39:3,24 72:18 81:10 83:4 91:17
   131:25 132:10
understating 102:20
understood 19:2,23 20:12 29:7
   55:13
unidentified 43:6
Uniform 118:12,16,24
union 26:12 104:21 105:14,16
unique 34:16 82:21
unit 90:9
UNITED 1:2
universe 88:16 89:16,24 90:2
University 28:17
unknown 44:22 45:6,13,18,23 46:9
unsigned 3:14
unsurprised 143:23
updated 22:7
upper 96:5
URL 16:15
use 16:4,9,21 33:14 43:10 46:4 55:2
   59:19 87:14,17 88:20 107:2
   139:12
useful 51:19

_____ **V** _____

vacation 98:7
valid 135:12
value 54:13,24 61:13 70:6,9 95:2,25
   96:6,9 97:16 98:22 99:10,11
   100:6,20 103:3,7,10,11,24,25
   104:2,7,11,19 105:12,18
valued 95:24 96:19
values 96:20 101:15
valuing 95:10,22 99:17 102:21
variable 70:4 76:19,21 77:7
variables 70:5
variants 56:22,24 57:5
variation 70:3,5
variations 88:24
variety 136:12,15
various 35:12 95:11 100:2 124:21

vary 70:13 101:9
verbatim 125:18 126:3
verify 54:9
version 13:5 40:25
versus 8:19 20:22 22:4 26:12 85:24
   98:11 101:21 127:23
videoconference 1:22 4:15,23
view 149:21
violation 5:3

_____ **W** _____

W 8:17 9:6
wage 100:7 101:2,7
wages 101:9,13
waived 3:9
want 9:13 44:16 50:23,24 54:18
   55:7 73:11 87:11,12 116:12
   117:12,24 121:13 131:15 133:9
   142:21 146:14 155:20
wanted 9:2 51:10 109:19 110:13
Washington 2:5 6:21
wasn't 14:21 27:14 38:5 40:15
   77:19 110:21 119:21 125:17
   137:14 139:18
water 33:17
way 13:2 45:19 51:19 54:3,7 59:17
   63:25 69:9 70:17 72:9,13 75:8
   80:8 83:24 93:24 94:17 100:4
   111:2,12 114:7 116:20 119:6
   124:9 127:3 132:7 135:19 143:3
   153:10 154:14 155:18 156:23
   162:17
ways 86:11 97:20 115:20
we're 29:17 76:12 82:4 84:5 97:24
   101:5
we've 19:18 27:11 49:4,8 75:11
   81:6 120:7,15
web 4:19 5:22
week 54:15 102:15 103:5,19 104:23
   105:15 107:23,24
week-to-week 104:9
weekends 106:10,20 107:4,9,12,17
   108:24
weeks 19:12 146:10,20,23
went 12:21 44:19,22 45:15 59:17
weren't 36:24 82:22 92:3 130:16
WHEREOF 162:19
white 41:5 44:22 45:6,7,22 47:10,11
   47:20,22 51:13
wide 136:12,15 143:17
willing 96:13
Wisconsin 28:17
wish 7:8
witness 1:19 2:10 3:10,16,18 4:16
   5:7,10,12,21 6:3 28:9 30:17 73:15
   159:2,4 162:10,13,19
witnesses 7:5
word 8:8,9 21:10 82:17 100:18

101:10 106:12 123:13
wording 107:9
words 107:3 157:9
work 18:17,23 19:13,15 20:18 21:5
   21:13 24:25 25:23 27:17 28:9,10
   29:25 30:5,21 32:13,17 46:20
   54:14 66:7 86:2,6 98:8 100:10
   102:15 104:8 106:9,10,20,22
   107:3,12,17 108:24 110:4,4,5,9
   110:10,12,17,18 111:16,18 156:7
worked 26:20 27:8 89:10 103:13,17
   104:16
workers 105:17
working 20:15 98:17 99:3 105:19
   156:22
workweek 14:21 108:22
world 13:11
Worley 23:4,8 24:2
worth 153:14
wouldn't 50:23 73:8 77:8 87:19
   93:8 97:19,21 99:6 101:20 105:15
   118:4 138:12 151:6 156:13
write 112:11
written 4:25 24:10 30:13 96:24
wrong 41:20 74:20 79:8 137:12
wrongful 98:13
wrote 106:21 142:25
www.SeeThroughNY.net 139:5

_____ **X** _____

X 1:3,12 161:2,12
xlsx 9:20

_____ **Y** _____

yeah 21:11 41:3 52:11 57:3 83:22
   85:11 155:18
year 20:25 37:21 41:7,9 42:17,24
   43:4,6,11 47:19 88:9 94:4 124:10
   126:5 132:22 139:9,15,18,24
   140:9
years 23:10,14 24:23 26:23 27:4,17
   28:3 36:7,12,15,18,19 38:14
   43:12 44:6 74:17 76:8,10 78:12
   79:20,23 80:3,6 83:2,3,16 84:15
   84:16 85:5,6,6,13,23 86:2 88:17
   88:20,21 89:4,6,11 91:22 118:11
   127:22,23 128:4,4,5 145:6,20,23
York 1:2,10,25 2:9,11,11 4:9 6:5
   8:20 9:24 20:22 22:4,22 23:15
   24:3,23 26:12 27:19 28:5,9,11
   65:15,22 66:2,8 68:3,9,12,17
   69:13 71:8 75:4 97:7,9 109:25
   139:7 162:4,8
Yup 74:12

_____ **Z** _____

Z 48:19 49:4
zero 39:21 70:7

Zoom 1:22 4:18

0

001 72:11
0115 123:7,24
01760 6:15
08 39:15

1

1 3:17 4:4 7:21 9:12 33:25 35:6
38:12,13 112:10 161:8
1,011 124:15
1:20 109:12
1:20-cv-03389 1:9
1:20-cv-03389-AT 8:20
10 15:25 70:23 73:25 74:9 122:24
123:10,23 124:2 145:7,17
10:05 1:14
100 2:10
10007-2601 2:11
1011 123:6 124:8,8,10
10th 162:20
11 9:12 18:7 34:14,19 82:10,12,20
122:24 123:3,10 124:3,5
115 124:2
1164 123:7 124:3,5
11th 12:18
12 17:11 116:11 122:25 123:10,14
12:10 73:11
12:20 73:12
1250 2:5
12th 14:7
13 4:4 9:4 15:16 38:9 40:18 161:9
14 145:7,17
14th 16:15
15 44:22 45:5 82:10,12,21 91:22
125:24 146:20,24
157 161:15
16 104:23
16-week 146:20
16-year 146:21
17 52:2,9 56:25 81:13
19 1:14 39:15 132:18 136:6 145:7
145:17,18
19109 2:7
1999 132:18

2

2 8:5 10:14,15,16 21:16 26:22 32:5
33:25 39:10 112:10,11 114:18
20 12:4 32:19 34:4 38:16 39:15
48:6 64:24 73:24 88:9,13 112:14
147:3
2003 16:20
20036 2:5
2004 143:11,20
2005 9:25 10:19 12:4 34:4 47:19
48:6 88:9,13 112:14 132:20,22

133:6,16 135:5,11 144:24 145:17
147:3
2006 144:14 145:7,17
2007 38:16 39:15
2008 15:25 38:16
2009 125:24 136:22 137:19,23
2010 124:15,16 125:5 144:18
2013 70:14 141:23 142:10
2014 125:6 144:13 145:19
2015 104:23
2016 105:5
2017 34:10,17 126:8,20 135:24
136:6 137:2 142:2,10
2018 94:4
2019 37:12 38:16 40:5 70:14 85:4
85:16 89:11 125:7,11,13 126:25
127:8 144:13 145:19 146:13
2020 9:25 10:19 20:22 34:17 37:10
38:4 39:21,25 47:19 108:16,19
139:9,16,18,24 140:9,11
2020-020833 2:13
2021 1:14 12:15 127:2,3,7 144:13
160:19 162:20
21 44:21 73:24 81:14 145:7,17,17
145:18
22 81:11,24 82:19
249 134:15
250 130:9,12,13,14,16 133:25 134:7
134:15 141:9 143:5 157:15,20
2507 1:5
26 81:12,25 82:19
264 6:14

3

3 8:15 21:19 32:20 40:19,24 41:4,14
41:23 42:2 43:20 47:7 97:12
125:22 130:2
30 3:16 152:6
300 2:5
3113(d) 4:13
35-hour 107:24
3621 26:11
37 1:5 94:6 104:24
37-and-a-half-hour 14:20
37.5 106:9,15 107:23 108:22 109:4
38 44:5 46:16

4

4 48:21 49:2 85:9 124:13 125:22
126:9 131:3 135:16 136:14
139:25 161:8,9
4:10 159:3
40-hour 54:14 104:23 105:15
107:23
43 52:4
438 70:13
46 64:18
47 64:24 130:23 131:9,13

48 64:24

5

5 4:4 14:12 48:21 102:23 106:6
127:11 133:10 161:8
5,008 123:17,20
50 118:11 157:18,20
50/50 110:6 111:16
500 25:21,23
5008 123:6
507 34:16 35:2
52 94:6
575 25:18

6

6 52:5,7 56:6,25 83:9 84:11 161:14
6/21/21 9:20
6/9/2021 8:21
60 47:21 48:5
6049 123:15 124:7
660 70:25
669 34:4 134:20,24

7

7 4:4 123:21,24 124:4 138:22
152:18 161:9
7/9/2021 9:8

8

8 35:17 37:9 42:11,13 48:9 64:3,6
123:19 141:18
80 143:6
848 70:14,20
881 70:19,22
8th 12:20 13:6

9

9 11:18 65:4 69:22 70:12 73:25
74:3 122:24 123:10,17,20
933 71:2
98 37:11
99 72:11